

Author Index

- Aasly J, 512
 Adams RJ, 143
 Aden SA, 454
 Agid Y, (suppl 3) S1
 Aglioti SM, 630
 Ahlberg J, 823
 Albin RL, 528
 Allen FH Jr., 624
 Alper M, 392
 Alpérovitch A, 214
 Alvarez-Cermeño JC, 222
 Alvord EC Jr., 524
 An H, 227
 Andermann E, 144
 Andermann F, 144
 Andreotti C, 138
 Andria G, 418
 Angelini C, 497
 Anno M, 133
 Annoni JM, 654
 Aoki Y, 685
 Aral B, 273
 Arenas J, 278
 Aridon P, 376
 Armstrong D, 400
 Arniego P, 259
 Åsberg A, 145
 Ascherio A, 676
- Bachert P, 248
 Bakay RAE, 558
 Ballabio A, 376
 Bandmann O, 278
 Baram TZ, 711
 Barkhof F, 252, 718
 Barkovich AJ, 596
 Barnhart H, 558
 Bartels M, 263
 Bartlett PA, 312
 Basel-Vanagaite L, 596
 Bataller L, 123, 347
 Bauer J, 305
 Baumgartner C, 281
 Baybis M, 668
 Beal MF, (suppl 3) S39
 Becker G, 279
 Becker JT, 81
 Beck H, 469
 Beijer C, 437
 Bell GS, 312
 Benrud-Larson L, 752
 Benton S, 128
 Berg D, 279
 Berg SZ, 685
- Berghoff M, 725
 Bernardi G, 693
 Berry-Kravis E, 616
 Bertelli S, 497
 Bertini E, 354
 Bertolasi L, 630
 Bertrand O, 73, 446
 Besson B, 815
 Besson G, 546
 Betz RC, 512
 Bhatia KP, 278, 489
 Bieber AJ, 680
 Bindoff LA, 497
 Bit-Avragim N, 121
 Bjerve KS, 145
 Bjorklund LM, (suppl 3) S135
 Blake DJ, 537
 Blaker PA, 174
 Blamire A, 533
 Blaser S, 252
 Bleck TP, (suppl 4) S27
 Blümcke I, 233
 Bocian M, 801
 Bodell A, 596
 Boerkoel CF, 400
 Boespflug-Tanguy O, 354
 Bootello A, 222
 Booze MW, 624
 Bourgeois BFD, 283
 Bradley WG, 804
 Brandoli C, 454
 Brefel-Courbon C, (suppl 3) S3
 Breteler MMB, 607
 Brex PA, 673
 Briem E, 278
 Briolotti V, 815
 Brivet M, 273
 Brockington M, 537
 Brodsky RA, 29
 Brooks DJ, 206, 647, (suppl 3) S110
 Brooks-Kayal AR, 503
 Brown D, (suppl 3) S61
 Brown P, 489
 Brown SC, 537
 Brüning T, 512
 Budreck EC, 503
 Buervenich S, 823
 Bunse M, 121
 Burns TM, 270
 Butler I, 400
- Caamaño-Isorna F, 546
 Calabresi P, 693
 Calandra S, 807
 Caldara-Schinetzer AS, 654
 Calder AJ, 427
 Cam M, 392
 Camu W, 815
- Capelle L, 524
 Carapelli S, 376
 Carmine A, 823
 Carpenter AF, 524
 Carrier J, 774
 Carr LJ, 128
 Casari G, 376
 Casez O, 546
 Catani M, 242
 Catapano AL, 807
 Cavagnini F, 138
 Celik A, 227
 Centone D, 693
 Chalmers-Redman R, (suppl 3) S61
 Chan D, 181
 Chander B, 57
 Chang BS, 596
 Chang SY, 810
 Cheng C, 366
 Chen H, 676
 Chen J, 743
 Chen LF, 810
 Cherubini A, 242
 Cheung NKV, 347
 Chiabrando C, 419
 Childs J, 405
 Chmura TA, (suppl 4) S2
 Chockkan V, 558
 Chong WK, 768
 Chopp M, 259, 743
 Chou NS, 810
 Churchill AJ, 658
 Clifford DB, (suppl 4) S27
 Coesmans M, 325
 Cohen B, 422
 Cohen LG, 521
 Collot S, 280
 Comi G, 718
 Condry C, 542
 Conrad CA, 109
 Corbett D, 731
 Corcia P, 815
 Cornblath DR, 691
 Cornblath WT, 528
 Cornu P, 524
 Costa D, 489
 Crino PB, 668
 Croes EA, 409
 Cross D, 528
 Cruts M, 409
 Cupini LM, 693
- Dahl H, 278
 Dal Forno G, 102
 Dallapiccola B, 397
 Dalmau J, 123, 347
 Dalton CM, 673
 Dalton P, 533
 Davidson BL, 781
 Davies M, 174
- Deacon R, 533
 Décarie A, 774
 Dechant G, 292
 de Curtis M, 382
 De Fusco M, 376
 de Jong FH, 607
 DeKosky ST, 81
 Delattre JY, 524
 Del Bigio MR, 337, 731
 DeLong MR, 558
 De Michele G, 376
 Dermaut B, 409
 Descamps V, 280
 Desguerre I, 273
 deVeber G, 149
 de Visser M, 437
 Devon RS, 144
 Dey R, 273
 De Zeeuw CI, 325
 Di Bonaventura C, 397
 Dietrich D, 469
 Dietz R, 121
 Di Giovanni S, 454
 Di Lazzaro V, 823
 Dileone M, 823
 Dobyns WB, 596
 Dorenbos K, 711
 Dostrovsky JO, 480
 Dottorini T, 397
 Drachman DB, 29
 Dubé C, 711
 Dubé MP, 144
 Dubowitz V, 537
 Ducros V, 214
 Duffau H, 524
 Dufouil C, 214
 Duncan JS, 312, 663, 688
 Durelli L, 718
 Düring M v., 512
 Dutch-Italian Alzheimer Research Group, 547
 Duyzen EG, 788
 Dyck PJ, 417
- Earley CJ, 690
 Early Treatment of Multiple Sclerosis Study Group, 718
 Ebner A, 759
 Echaniz-Laguna A, 687
 Edan G, 718
 Edmonds CJ, 768
 Egeo G, 397
 Eggers J, 797
 Eguchi K, 21
 Ehrbrecht A, 512
 Elger CE, 280, 305, 469, 686
 Engels H, 512
 Enno T, 337
 Epifanio A, 376

January issue, pp 1-148; February issue, pp 149-284; March issue, pp 285-422; April issue, pp 423-550; May issue, pp 551-690; June issue, pp 691-848.)

Author Index

- Aasly J, 512
 Adams RJ, 143
 Aden SA, 454
 Agid Y, (suppl 3) S1
 Aglioti SM, 630
 Ahlberg J, 823
 Albin RL, 528
 Allen FH Jr., 624
 Alper M, 392
 Alpérovitch A, 214
 Alvarez-Cermeño JC, 222
 Alvord EC Jr., 524
 An H, 227
 Andermann E, 144
 Andermann F, 144
 Andreotti C, 138
 Andria G, 418
 Angelini C, 497
 Anno M, 133
 Annoni JM, 654
 Aoki Y, 685
 Aral B, 273
 Arenas J, 278
 Aridon P, 376
 Armstrong D, 400
 Arniego P, 259
 Åsberg A, 145
 Ascherio A, 676
- Bachert P, 248
 Bakay RAE, 558
 Ballabio A, 376
 Bandmann O, 278
 Baram TZ, 711
 Barkhof F, 252, 718
 Barkovich AJ, 596
 Barnhart H, 558
 Bartels M, 263
 Bartlett PA, 312
 Basel-Vanagaite L, 596
 Bataller L, 123, 347
 Bauer J, 305
 Baumgartner C, 281
 Baybis M, 668
 Beal MF, (suppl 3) S39
 Becker G, 279
 Becker JT, 81
 Beck H, 469
 Beijer C, 437
 Bell GS, 312
 Benrud-Larson L, 752
 Benton S, 128
 Berg D, 279
 Berg SZ, 685
- Berghoff M, 725
 Bernardi G, 693
 Berry-Kravis E, 616
 Bertelli S, 497
 Bertini E, 354
 Bertolasi L, 630
 Bertrand O, 73, 446
 Besson B, 815
 Besson G, 546
 Betz RC, 512
 Bhatia KP, 278, 489
 Bieber AJ, 680
 Bindoff LA, 497
 Bit-Avragim N, 121
 Bjerve KS, 145
 Bjorklund LM, (suppl 3) S135
 Blake DJ, 537
 Blaker PA, 174
 Blamire A, 533
 Blaser S, 252
 Bleck TP, (suppl 4) S27
 Blümcke I, 233
 Bocian M, 801
 Bodell A, 596
 Boerkoel CF, 400
 Boespflug-Tanguy O, 354
 Bootello A, 222
 Booze MW, 624
 Bourgeois BFD, 283
 Bradley WG, 804
 Brandoli C, 454
 Brefel-Courbon C, (suppl 3) S3
 Breteler MMB, 607
 Brex PA, 673
 Briem E, 278
 Briolotti V, 815
 Brivet M, 273
 Brockington M, 537
 Brodsky RA, 29
 Brooks DJ, 206, 647, (suppl 3) S110
 Brooks-Kayal AR, 503
 Brown D, (suppl 3) S61
 Brown P, 489
 Brown SC, 537
 Brüning T, 512
 Budreck EC, 503
 Buervenich S, 823
 Bunse M, 121
 Burns TM, 270
 Butler I, 400
- Caamaño-Isorna F, 546
 Calabresi P, 693
 Calandra S, 807
 Caldara-Schnitzer AS, 654
 Calder AJ, 427
 Cam M, 392
 Camu W, 815
- Capelle L, 524
 Carapelli S, 376
 Carmine A, 823
 Carpenter AF, 524
 Carrier J, 774
 Carr LJ, 128
 Casari G, 376
 Casez O, 546
 Catani M, 242
 Catapano AL, 807
 Cavagnini F, 138
 Celik A, 227
 Centone D, 693
 Chalmers-Redman R, (suppl 3) S61
 Chan D, 181
 Chander B, 57
 Chang BS, 596
 Chang SY, 810
 Cheng C, 366
 Chen H, 676
 Chen J, 743
 Chen LF, 810
 Cherubini A, 242
 Cheung NKV, 347
 Chiabrando C, 419
 Childs J, 405
 Chmura TA, (suppl 4) S2
 Chockkan V, 558
 Chong WK, 768
 Chopp M, 259, 743
 Chou NS, 810
 Churchill AJ, 658
 Clifford DB, (suppl 4) S27
 Coesmans M, 325
 Cohen B, 422
 Cohen LG, 521
 Collot S, 280
 Comi G, 718
 Condry C, 542
 Conrad CA, 109
 Corbett D, 731
 Corcia P, 815
 Cornblath DR, 691
 Cornblath WT, 528
 Cornu P, 524
 Costa D, 489
 Crino PB, 668
 Croes EA, 409
 Cross D, 528
 Cruts M, 409
 Cupini LM, 693
- Dahl H, 278
 Dal Forno G, 102
 Dallapiccola B, 397
 Dalmau J, 123, 347
 Dalton CM, 673
 Dalton P, 533
 Davidson BL, 781
 Davies M, 174
- Deacon R, 533
 Décarie A, 774
 Dechant G, 292
 de Curtis M, 382
 De Fusco M, 376
 de Jong FH, 607
 DeKosky ST, 81
 Delattre JY, 524
 Del Bigio MR, 337, 731
 DeLong MR, 558
 De Michele G, 376
 Dermaut B, 409
 Descamps V, 280
 Desguerre I, 273
 deVeber G, 149
 de Visser M, 437
 Devon RS, 144
 Dey R, 273
 De Zeeuw CI, 325
 Di Bonaventura C, 397
 Dietrich D, 469
 Dietz R, 121
 Di Giovanni S, 454
 Di Lazzaro V, 823
 Dileone M, 823
 Dobyns WB, 596
 Dorenbos K, 711
 Dostrovsky JO, 480
 Dottorini T, 397
 Drachman DB, 29
 Dubé C, 711
 Dubé MP, 144
 Dubowitz V, 537
 Ducros V, 214
 Duffau H, 524
 Dufouil C, 214
 Duncan JS, 312, 663, 688
 Durelli L, 718
 Düring M v., 512
 Dutch-Italian Alzheimer Research Group, 547
 Duyzen EG, 788
 Dyck PJ, 417
- Earley CJ, 690
 Early Treatment of Multiple Sclerosis Study Group, 718
 Ebner A, 759
 Echaniz-Laguna A, 687
 Edan G, 718
 Edmonds CJ, 768
 Egeo G, 397
 Eggers J, 797
 Eguchi K, 21
 Ehrbrecht A, 512
 Elger CE, 280, 305, 469, 686
 Engels H, 512
 Enno T, 337
 Epifanio A, 376

January issue, pp 1-148; February issue, pp 149-284; March issue, pp 285-422; April issue, pp 423-550; May issue, pp 551-690; June issue, pp 691-848.)

- Eriksson E, 823
 Estournet B, 537
 Evatt M, 558
 Faden AI, 454
 Falk R, 725
 Fanelli R, 419
 Fanin M, 497
 Fantini ML, 774
 Farlow M, 81
 Fealey RD, 752
 Feigenbaum A, 252
 Feistner H, 686
 Fekete G, 685
 Feldkamp CS, 743
 Fernández O, 718
 Fernando K, 673
 Ferreira JJ, (suppl 3) S3
 Ferreri F, 102
 Filiano J, 685
 Filipek PA, 801
 Filippi M, 718
 Fine EJ, (suppl 4) S27
 Fini R, 102
 Fiorio M, 630
 Fischer D, 233
 Fish DR, 663
 Fisher M, 10
 Flammer J, 825
 Fletcher CF, 5
 Flex E, 397
 Fowler B, 248
 Fox NC, 181
 Fox R, 417
 Francis G, 718
 François C, 542
 Franssen H, 437
 Freeman A, 558
 Freeman R, 725
 Free SL, 658
 French ALS Research Group, 815
 Frens MA, 325
 Frey KA, 528
 Fricke B, 512
 Friedlander RM, 267
 Friston KJ, 663
 Frost C, 181
 Frye CA, 390
 Fuerst D, 413
 Fueyo J, 109
 Fukuda T, 21
 Fukuda Y, 392
 Gabriel S, 469
 Gacinovic S, 489
 Gadian DG, 768
 Gage FH, 421
 Gagnon JF, 774
 Gaillard CA, 325
 Galimberti D, 547
 Ganeshan V, 167
 Garber J, 354
 Gargus JJ, 801
 Gaymard B, 542
 Geerlings MI, 607
 Geleijns K, 570
 Gerloff C, 263
 Gerschlager W, 489
 Geschwind MD, 549
 Gestal-Otero JJ, 546
 Giallardo AT, 397
 Giraldi FP, 138
 Gitelman DR, 35
 Giuliani F, 588
 Glass TL, 109
 Gobbi G, 242
 Goebel HH, 512
 Goetz CG, 616, 624, (suppl 4) S1, (suppl 4) S2
 Gomez-Manzano C, 109
 Gonzalez-Alegre P, 781
 González-Porqué P, 222
 Gouleau GA, 144
 Gow A, 354
 Gowda RM, 143
 Gowling G, 429
 Grant PE, 596
 Graus F, 123, 347
 Greenberg DA, 405
 Green J, 558
 Griffin JW, 57
 Groeneveld CJ, 437
 Gronostajski RM, 636
 Gros-Louis F, 144
 Grundell MB, 823
 Guénor M, 73, 446
 Guicheney P, 537
 Guijarro TR, 50
 Guven A, 392
 Guy J, 198
 Haber M, 558
 Hagel C, 118
 Hagen K, 145
 Hagerman P, 616
 Hagerman R, 616
 Haines JL, 624
 Häkansson A, 823
 Hall SM, 174
 Hammers A, 312
 Hamosh A, 685
 Hand CK, 144
 Hanna MG, 128
 Hanson IM, 658
 Hari R, 551
 Harting I, 248
 Hartung HP, 718
 Hasan C, 57
 Hasegawa M, 133
 Haufschmid T, 825
 Hauswirth WW, 198
 Hayden MR, 144
 Heils A, 280
 Heinemann U, 469
 Heinze HJ, 686
 Helmstaedter C, 305
 Hénaff MA, 73, 446
 Henry S, 731
 Hernandez D, 804
 Hernán MA, 546, 676
 Herrmann R, 537
 Herzog AG, 390
 Hiner BC, 624
 Hirano T, 325
 Hirsch EC, (suppl 3) S49
 Ho KL, 259
 Ho LT, 810
 Hobson G, 354
 Hoffman EP, 454
 Hoffmann GF, 248
 Hofman A, 409, 607
 Hohlfeld R, 292
 Hoke A, 57
 Holmberg B, 823
 Hommes OR, 718
 Hong J, 189
 Horton JC, 417
 Horvath S, 280
 Hou J, 636
 Houhou N, 280
 Hsieh JC, 810
 Hsu CY, 227
 Hu M, 109
 Hubble JP, 624
 Hudson AJ, 420
 Hunot S, (suppl 3) S49
 Hutchison WD, 278, 480
 Hveem K, 145
 Ichinohe A, 685
 Ikonomovic MD, 81
 Imai Y, 588, 731
 Indo Y, 418
 Innes AM, 596
 Isaacs EB, 768
 Isacson O, (suppl 3) S135
 Isnard J, 446
 Ito Y, 133
 Iwanaga K, 21
 Izumi T, 685
 Izumo S, 400
 Jacobs BC, 570
 Jacobs H, 278
 Jafari-Schlueter HF, 815
 Jain M, 354
 Jakobs C, 248
 James WH, 546
 Janssen JC, 181
 Janszky J, 759
 Jasti SL, 109
 Jenkins R, 181
 Jenner P, (suppl 3) S26
 Jennings D, (suppl 3) S160
 Jiang H, 109, 743
 Jiang Q, 259
 Jin K, 405
 Johnels B, 823
 Johnson NA, 35
 Johnson RT, 1, 422, 691
 Johnston MV, 549, 550
 Jokeit H, 759
 Jones HR, 270
 Jones RJ, 29
 Julien JP, 429
 Jung WI, 121
 Juraneck J, 801
 Kaiser HJ, 825
 Kalmachey R, 685
 Kalmijn S, 437
 Kamboh MI, 81
 Kamholz J, 354
 Kapoor R, 174
 Katakowski M, 743
 Kathpal M, 725
 Katzenschläger R, 489
 Kauer DL, 81
 Kaye JA, 420
 Kerr S, 680
 Kerschensteiner M, 292
 Keswani SC, 57
 Khan F, 725
 Khateb A, 654
 Kieburtz K, (suppl 3) S100
 Kinoshita M, 392
 Kirkham FJ, 167
 Kirkinezos IG, 804
 Klein CJ, 417
 Klein CM, 752
 Klingborg K, 823
 Klunk WE, 81
 Knoblauch SM, 454
 Kobayashi K, 392
 Kobayashi T, 133
 Kocabay K, 392
 Koch B, 797
 Koeppen AH, 827
 Kohlschütter A, 118
 Kojima K, 685
 Koller WC, 624
 König I, 797
 Kopp N, 546
 Kopylev L, 521
 Kordower JH, (suppl 3) S120
 Krägeloh-Mann I, 252
 Krajewski K, 354
 Kreuz FR, 121
 Kriz J, 429
 Krolak-Salmon P, 73, 446, 546
 Kros JM, 325
 Kruse B, 759
 Kubisch C, 512
 Kudin A, 686
 Kula RW, 143
 Kunz WS, 686
 Kupski WJ, 703
 Kure S, 685
 LaChance DH, 270
 Lampert E, 687
 Lang AE, 480
 Lanska D, (suppl 4) S2
 Lanzi R, 138
 Larsen PH, 731
 Laulhere TM, 801
 Launer LJ, 607
 Lee A, 668
 Lee HY, 109

- Lee JM, 227
 Lee MS, 417
 Lee Y, 227
 Lehey M, 616
 Lees AJ, 489
 Lehmann TN, 469
 Leigh RJ, 688
 Lemieux L, 312, 663
 Lennon VA, 5, 580, 752
 Lesser RP, 285
 Leusen JHW, 570
 Levey AI, 788
 Lewin AS, 198
 Lewin F, 616
 Lewis RA, 7, 354, 703
 Lewis S, 278
 Li J, 703
 Li LPH, 810
 Li W, 354
 Li XQ, 366
 Li Y, 743
 Librizzi L, 382
 Lie DC, 421
 Lien CF, 810
 Linden DJ, 325
 Lin W, 227
 Lin YY, 810
 Liolitsa D, 128
 Lisak RP, 7
 Liu JL, 109
 Liu RSN, 312
 Liu TJ, 109
 Lochmüller H, 512
 Lockridge O, 788
 Loeb JA, 703
 Logvinova A, 405
 Lonsdorfer J, 687
 Lopatinskaya L, 818
 Lopez OL, 81
 Losa M, 138
 Low PA, 752
 Lozano AM, 480
 Lu M, 743
 Lucas A, 768
 Lucca U, 419
 Lucchinetti CF, 580
 Luo C, 325
 Lupski JR, 400

 MacGregor DL, 144
 MacManus DG, 673
 Maeda T, 685
 Maggi F, 807
 Major EO, 636
 Maldonado M, 668
 Malin JP, 512
 Mancias P, 354, 400
 Mandonnet E, 524
 Manfredi M, 397
 Manteghi T, (suppl 4) S27
 Mao XO, 405
 Marconi R, 376
 Marek K, (suppl 3) S160
 Margrie S, 718
 Marsac C, 273
 Martin ER, 624

 Martin MA, 278
 Martinuzzi A, 497
 Masjuan J, 222
 Masser-Frye D, 801
 Mastaglia F, 624
 Matsubara Y, 685
 Mauguire F, 73, 446
 Mayatepek E, 248
 Mayeux V, 815
 Mays LZ, 801
 McArthur JC, 57
 McCune A, 145
 McDonald JW III, 827
 McDonald W, 558
 McGlothlan JL, 50
 McKinlay I, 533
 McNaught KSP, (suppl 3) S73
 McShane MA, 167
 Meador KJ, (suppl 4) S27
 Mecocci P, 242
 Meijer IA, 144
 Meinck HM, 512
 Melke J, 823
 Melson L, (suppl 4) S27
 Mercuri E, 537
 Merlini L, 497
 Merschhemke M, 663
 Mertens M, 759
 Messam CA, 636
 Mesulam MM, 35
 Mewes K, 558
 Meyer K, 797
 Micieli G, 376
 Middleton LT, 624
 Miller DH, 673
 Miller VM, 781
 Mine M, 273
 Minoshima S, 528
 Mishra S, (suppl 4) S27
 Miszkiel KA, 673
 Mitchell TN, 658
 Mizuno Y, 133
 Modahl C, 801
 Mongini T, 497
 Montastruc JL, (suppl 3) S3
 Montine TJ, 420
 Montplaisir J, 774
 Moo LR, 147
 Moore AT, 658
 Moore RY, 206
 Moraes CT, 804
 Morgante L, 376
 Mori H, 133
 Morrow JD, 420
 Mortier W, 233
 Motoi Y, 133
 Motomura M, 21
 Munoz DG, 420
 Muntoni F, 537
 Musolino R, 376

 Nagelkerken L, 818
 Nagel S, 118
 Nakagawa M, 400
 Nakao Y, 21

 Nance MA, 624
 Narayanan M, 267
 Nasimbeni A, 497
 Niddam DM, 810
 Nissbrant H, 823

 Oertel WH, 278
 Okun MS, (suppl 4) S27
 Olanow CW, (suppl 3) S1,
 (suppl 3) S73, (suppl 3)
 S87, (suppl 3) S149
 Oliva CP, 807
 Oliveira SA, 624
 Oliviero A, 823
 Olson L, 823
 Ondo WG, 624
 Ory F, (suppl 3) S3
 Osterziel KJ, 121
 O'Sullivan J, 489
 Ota S, 133

 Pahwa R, 624
 Papasozomenos SCH, 400
 Parent J, 668
 Parrish TB, 35
 Pasqualetti P, 102
 Paulson HL, 781
 Pauri F, 102
 Pavese N, 647
 Pavlakis SG, 143
 Payoux P, (suppl 3) S3
 Peeling J, 731
 Pelliccioli GP, 242
 Pericak-Vance MA, 624
 Perret-Liaudet A, 546
 Perrot A, 121
 Petit D, 774
 Petrucci SM, 242
 Piao X, 596
 Piccini PP, 206, 647
 Piccirilli M, 242
 Pike M, 533
 Pilato F, 823
 Pirker W, 489
 Pisani F, 693
 Pittock SJ, 580
 Pizzuti A, 397
 Plant GT, 673
 Plaza J, 222
 Plewnia C, 263
 Plewnia K, 376
 Ploner CJ, 542
 Pollermann BZ, 654
 Polman CH, 818
 Pols HAP, 607
 Polster T, 248
 Pontiroli AE, 138
 Popovic N, 512
 Porter H, 65
 Pouwels PJW, 252
 Power C, 588, 731
 Preisig T, 825
 Prengler M, 143, 167
 Probst EN, 118
 Prohovnik I, 143
 Proping P, 280

 Pruente C, 825
 Ptak R, 654
 Pukrop R, 305

 Qasrawi B, 596
 Qi X, 198
 Quijano-Roy S, 537
 Quinn JF, 420

 Rademakers R, 409
 Rahman S, 128
 Ramos ER, 801
 Ranger-Rogez S, 280
 Raol YSH, 503
 Rascol O, (suppl 3) S3
 Ratan R, 10
 Rebstock J, 280
 Remy S, 469
 Renvall H, 551
 Reuber M, 305
 Ribera F, 687
 Rieckmann P, 252
 Riefflin A, 121
 Riess O, 279
 Rinn AM, 283
 Rivaud-Péchoux S, 542
 Rivera VM, 189
 Rocca M, 718
 Rodriguez D, 354
 Rodriguez M, 680
 Rogawski MA, 288
 Roldán E, 222
 Romero NB, 537
 Rompré S, 774
 Roohi F, 143
 Rosenfeld MR, 123, 347
 Rossi M, 376
 Rossini PM, 102, 824
 Rossor MN, 181
 Rothstein JD, 423
 Rovaris M, 718
 Ruitenberg A, 607
 Russell JA, 270

 Sádaba MC, 222
 Salek-Haddadi A, 663
 Salomons GS, 248
 Sander JWAS, 312, 688
 Sandroni P, 752
 Sartori E, 497
 Satas S, 65
 Satran R, (suppl 4) S27
 Saturno E, 823
 Sawaki L, 521
 Saxton J, 81
 Scabill RL, 181
 Scammell TE, 154
 Scarpini E, 547
 Schapira AHV, (suppl 3)
 S1, (suppl 3) S16, (suppl
 3) S149
 Scheithauer B, 668
 Scheltens P, 547
 Schlemmer H, 248
 Schmidt O, 121
 Schoonenboom N, 547

- Schoser BGH, 512
 Schott JM, 181
 Schröder JM, 512
 Schröder R, 233, 686
 Schroers A, 233, 512
 Schulhof B, 823
 Schulze A, 248
 Schumacher JM, (suppl 3) S135
 Schwechter EM, 91
 Sciama T, 242
 Scoazec JY, 546
 Scott BL, 624
 Scott WK, 624
 Seeldrayers P, 718
 Seibyl J, (suppl 3) S160
 Seidel G, 797
 Seitz RJ, 759
 Seni MH, 144
 Senin U, 242
 Sewry CA, 537
 Shah A, 413
 Shahabi HN, 823
 Shah AK, 703
 Shah J, 413
 Shiao AS, 810
 Shigemoto R, 325
 Shiraishi H, 21
 Shorvon SD, 312, 658
 Shy ME, 354, 703
 Sibbing D, 278
 Siciliano G, 497
 Silan F, 392
 Silver IA, 65
 Simonati A, 418
 Simsek E, 392
 Sinnreich M, 417
 Sisodiya SM, 312, 658
 Skinner M, 725
 Slama A, 273
 Sletten D, 752
 Small GW, 624
 Smith KJ, 174
 Smith M, 801
 Smits M, 818
 Smits PAS, 325
 Song H, 421
 Sonty SP, 35
 Sørensen P, 718
 Spelbrink H, 278
 Spence MA, 801
 Sperle K, 354
 Stadelmann C, 292
 Stajich JM, 624
 Steinbach M, (suppl 4) S27
 Steinberg DA, (suppl 4) S27
 Stein J, 533
 Stern BJ, 549
 Stern LZ, 400
 Stern MB, 624
 Stevens CF, 421
 Stevens JM, 658
- Steward O, 711
 Stijnen T, 607
 Stocchi F, (suppl 3) S87
 Stögmann E, 281
 Stovner LJ, 145
 Straub V, 537
 Straussberg R, 596
 Streichenberger N, 546
 Styles P, 533
 Sullivan PG, 711
 Sun Y, 405
 Suzuki Y, 685
 Swanson JW, (suppl 4) S27
 Swanson KR, 524
 Sweet R, 81
 Sydow O, 823
- Takanashi JL, 588
 Takanashi M, 133
 Takashima H, 400
 Takkouche B, 546
 Tallon-Baudry C, 73, 446
 Tanaka K, 133
 Tanguy ML, 524
 Tarducci R, 242
 Tatton N, (suppl 3) S61
 Tatton WG, (suppl 3) S61
 Tejada-Simon MV, 189
 Terreni MR, 138
 Tessendorf N, 305
 Theodore WH, 286
 Thobois S, 546
 Thompson AJ, 673
 Thompson CK, 35
 Thoresen M, 65
 Thorstensen K, 145
 Tilgen N, 280
 Tinazzi M, 630
 Tiranti V, 278
 Toda T, 392
 Tomelleri G, 497
 Tonali PA, 823
 Tonin P, 497
 Toole JF, (suppl 4) S27
 Tooley JR, 65
 Torbergsen T, 512
 Torelli S, 537
 Toscano A, 497
 Toscano CD, 50
 Toscano E, 418
 Tranchant C, 687
 Trender-Gerhardt I, 278
 Triche S, 558
 Truong W, 366
 Tselis AC, 703
 Tsujihata M, 21
 Tunc M, 392
 Tuxhorn I, 759
 Tyler K, (suppl 4) S27
 Tzourio C, 214
- Uitdehaag BMJ, 718
 Umeda Y, 133
 Urbach H, 233
 Urban BW, 469
- Valente L, 497
 van Alphen AM, 325
 Van Broeckhoven C, 409
 Vance JM, 624
 Van Coster R, 252
 Van Den Berghe L, 273
 van den Berg LH, 437, 570
 Van den Broeck M, 409
 van der Geest JN, 325
 van der Knaap MS, 252
 van der Pol WL, 570
 van der Tweel I, 437
 van der Voorn P, 252
 van de Winkel JGJ, 570
 van Doorn PA, 570
 van Duijn CM, 409
 Van Effenterre R, 524
 van Heyningen V, 658
 Van Hove J, 685
 van Sorge NM, 570
 van Strip JA, 570
 van Swieten JC, 607
 van Waesberghe JHTM, 718
 Veldink JH, 437
 Velisek L, 91
 Velíšková J, 91
 Verhoeven NM, 248
 Vernino S, 752
 Vielhaber S, 686
 Vighetto A, 73, 446
 Vilchez JJ, 347
 Villar LM, 222
 Vincent A, 533
 Vitek JL, 558
 Vles JSH, 252
 Vo KD, 227
 Vogt MHJ, 818
 Voit T, 537, 596
 Volpicelli-Daley LA, 788
 Vorgerd M, 233, 512
 Voss B, 512
- Wade AM, 167
 Wade DF, 123
 Wagner K, 690
 Wahlay N, 558
 Wald JA, 528
 Walsh CA, 596, 668
 Wang L, 259, 743
 Wang MM, 147
 Wang X, 81
 Wang Y, 743
 Warner TT, (suppl 3) S16
 Warter JM, 687
 Watson C, 413
 Watts RL, 624
- Waxman SG, 150
 Weaver SA, 50
 Weiner HL, 668
 Weintraub S, 35
 Weisz V, 118
 Wekerle H, 292
 Wernette K, 528
 Westberg L, 823
 Whone AL, 206
 Wiedemann F, 686
 Willett WC, 676
 Williamson KA, 658
 Wills A, 489
 Wilson CJ, 807
 Wilson MJ, 337
 Winkler K, 686
 Winn MP, 624
 Winter RM, 596
 Wisniewski S, 81
 Witteman JCM, 607
 Witte OW, 759
 Wittkugel O, 118
 Woermann FG, 759
 Wokke JHJ, 437, 570
 Wood NW, 278
 Worwood M, 145
 Wuu J, 616
- Xie L, 405
 Xu QG, 366
- Yamakawa Y, 325
 Yaseen Z, 521
 Yasuhara M, 133
 Yeung R, 668
 Yong VW, 588, 731
 York GK, (suppl 4) S27
 Yoshimura T, 21
 Yoshioka M, 392
 Yung WKA, 109
 Yuva Y, 537
 Yvert B, 73
- Zahn S, 512
 Zang YCQ, 189
 Zerres K, 233
 Zeumer H, 118
 Zeviani M, 278
 Zhang C, 743
 Zhang F, 624
 Zhang JY, 558
 Zhang JZ, 189
 Zhang L, 259
 Zhang R, 259
 Zhang SM, 676
 Zhang W, 267
 Zhang ZG, 259, 743
 Zijlmans J, 489
 Zimprich F, 281
 Zochodne DW, 366
 Zoll J, 687

Subject Index

Absence seizures

functional magnetic resonance imaging of human absence seizures (Salek-Haddadi et al) 2003;53:663

ACE gene

phenotype modulators in myophosphorylase deficiency (Martinuzzi et al) 2003;53:497

Acetylcholine receptors

altered hippocampal muscarinic receptors in acetylcholinesterase-deficient mice (Volpicelli-Daley et al) 2003;53:788

the spectrum of autoimmune autonomic neuropathies (Klein et al) 2003;53:752

Acetylcholinesterase deficiency

altered hippocampal muscarinic receptors in acetylcholinesterase-deficient mice (Volpicelli-Daley et al) 2003;53:788

Adenine monophosphate deaminase 1 gene (AMPD1)

phenotype modulators in myophosphorylase deficiency (Martinuzzi et al) 2003;53:497

Aging

age-dependent changes in the ability to encode a novel elementary motor memory (Sawaki et al) 2003;53:521

ALS2 gene

an ALS2 gene mutation causes hereditary spastic paraparesis in a Pakistani kindred (Gros-Louis et al) 2003;53:144 (Letter)

Alzheimer's disease, analysis

chemokines in serum and cerebrospinal fluid of Alzheimer's disease patients (Galimberti et al) 2003;53:547 (Letter)

motor cortex excitability in Alzheimer's disease: a transcranial magnetic stimulation study (Ferreri et al) 2003;53:102

motor cortex hyperexcitability to transcranial magnetic stimulation in Alzheimer's disease: evidence of impaired glutamatergic neurotransmission? (Di Lazzaro et al) 2003;53:823 (Letter)

motor cortex hyperexcitability to transcranial magnetic stimulation in Alzheimer's disease: evidence of impaired glutamatergic neurotransmission? (Rossini et al) 2003;53:824 (Reply)

peripheral biomarkers of oxidative damage in Alzheimer's disease (Chiabrando et al) 2003;53:419 (Letter)

peripheral biomarkers of oxidative damage in Alzheimer's disease (Montine et al) 2003;53:420 (Reply)

plasma and cerebrospinal fluid α 1-antichymotrypsin levels in Alzheimer's disease: correlation with cognitive impairment (DeKosky et al) 2003;53:81

Alzheimer's disease, assessment

assessing the onset of structural change in familial Alzheimer's disease (Schott et al) 2003;53:181

Alzheimer's disease, early-onset

PRNP Val129 homozygosity increases risk for early-onset Alzheimer's disease (Dermaut et al) 2003;53:409

Alzheimer's disease, familial

assessing the onset of structural change in familial Alzheimer's disease (Schott et al) 2003;53:181

Alzheimer's disease, juvenile

atypical focal MRI lesions in a case of juvenile Alzheimer's disease (Probst et al) 2003;53:118

American Neurological Association (ANA)

history of the American Neurological Association in celebration of the 125th anniversary: *tempus et hora: time and the hour*: foreword (Goetz) 2003;53:(suppl 4) S1

history of the American Neurological Association in celebration of the 125th anniversary: *tempus et hora: time and the hour*: PART 1: the history of 19th century neurology and the American Neurological Association (Goetz et al) 2003;53:(suppl 4) S2

history of the American Neurological Association in celebration of the 125th anniversary: *tempus et hora: time and the hour*: PART 2: history of 20th century neurology: decade by decade (Tyler et al) 2003;53:(suppl 4) S27

AMPD1 gene

phenotype modulators in myophosphorylase deficiency (Martinuzzi et al) 2003;53:497

Amyloidosis

endothelial dysfunction precedes C-fiber abnormalities in primary (AL) amyloidosis (Berghoff et al) 2003;53:725

Amyotrophic lateral sclerosis, analysis

is there mitochondrial dysfunction in amyotrophic lateral sclerosis skeletal muscle? (Echaniz-Laguna et al) 2003;53:687 (Reply)

is there mitochondrial dysfunction in amyotrophic lateral sclerosis skeletal muscle? (Vielhaber et al) 2003;53:686 (Letter)

of mice and men: reconciling preclinical ALS mouse studies and human clinical trials (Rothstein) 2003;53:423 (Editorials)

Amyotrophic lateral sclerosis, pathogenesis

an ALS2 gene mutation causes hereditary spastic paraparesis in a Pakistani kindred (Gros-Louis et al) 2003;53:144 (Letter)

Amyotrophic lateral sclerosis, sporadic

N19S, a novel single base substitution in the SOD1 gene in sporadic amyotrophic lateral sclerosis: no evidence for disease causation (Mayeux et al) 2003;53:815

Amyotrophic lateral sclerosis, treatment

additive neuroprotective effects of minocycline with creatine in a mouse model of ALS (Zhang et al) 2003;53:267

efficient three-drug cocktail for disease induced by mutant superoxide dismutase (Kriz et al) 2003;53:429

a randomized sequential trial of creatine in amyotrophic lateral sclerosis (Groeneveld et al) 2003;53:437

regular exercise is beneficial to a mouse model of amyotrophic lateral sclerosis (Kirkinezos et al) 2003;53:804

Analgesia

μ opioid receptors and analgesia at the site of a peripheral nerve injury (Truong et al) 2003;53:366

Angiogenesis

mechanisms underlying PTEN regulation of vascular endothelial growth factor and angiogenesis (Gomez-Manzano et al) 2003;53:109

- statins induce angiogenesis, neurogenesis, and synaptogenesis after stroke (Chen et al) 2003;53:743
- Angiotensin-converting enzyme**
phenotype modulators in myophosphorylase deficiency (Martinuzzi et al) 2003;53:497
- Animal models**
additive neuroprotective effects of minocycline with creatine in a mouse model of ALS (Zhang et al) 2003;53:267
- altered hippocampal muscarinic receptors in acetylcholinesterase-deficient mice (Volpicelli-Daley et al) 2003;53:788
- bioenergetic approaches for neuroprotection in Parkinson's disease (Beal) 2003;53(suppl 3) S39
- chronic hydrocephalus in rats and humans: white matter loss and behavior changes (Del Bigio et al) 2003;53:337
- correlation between extracellular glucose and seizure susceptibility in adult rats (Schwechter et al) 2003;53:91
- head cooling with mild systemic hypothermia in anesthetized piglets is neuroprotective (Tooley et al) 2003;53:65
- magnetic resonance imaging and neurosphere therapy of stroke in rat (Zhang et al) 2003;53:259
- of mice and men: reconciling preclinical ALS mouse studies and human clinical trials (Rothstein) 2003;53:423 (Editorials)
- regular exercise is beneficial to a mouse model of amyotrophic lateral sclerosis (Kirkinezos et al) 2003;53:804
- Anti-neuronal nuclear autoantibody type 2**
anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pittock et al) 2003;53:580
- Antibodies**
anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pittock et al) 2003;53:580
- anti-GM1 IgG antibodies induce leukocyte effector functions via Fc γ receptors (van Sorge et al) 2003;53:570
- do calcium channel autoantibodies cause cerebellar ataxia with Lambert-Eaton syndrome? (Fletcher and Lennon) 2003;53:5 (Editorial)
- maternal neuronal antibodies associated with autism and a language disorder (Dalton et al) 2003;53:533
- mechanisms underlying cerebellar motor deficits due to mGluR1-autoantibodies (Coesmans et al) 2003;53:325
- the spectrum of autoimmune autonomic neuropathies (Klein et al) 2003;53:752
- α 1-Antichymotrypsin**
plasma and cerebrospinal fluid α 1-antichymotrypsin levels in Alzheimer's disease: correlation with cognitive impairment (DeKosky et al) 2003;53:81
- Antiepileptic drugs**
antiepileptic drugs as a possible neuroprotective strategy in brain ischemia (Calabresi et al) 2003;53:693
- Antiretroviral toxic neuropathy**
FK506 is neuroprotective in a model of antiretroviral toxic neuropathy (Keswani et al) 2003;53:57
- Aphasia, primary progressive**
axonal injury within language network in primary progressive aphasia (Catani et al) 2003;53:242
- primary progressive aphasia: PPA and the language network (Sonty et al) 2003;53:35
- Apolipoprotein C-II deficiency**
apolipoprotein C-II deficiency presenting as a lipid encephalopathy in early infancy (Wilson et al) 2003;53:807
- Apoptosis**
apoptosis in Parkinson's disease: signals for neuronal degeneration (Tatton et al) 2003;53:(suppl 3) S61
- Arterial ischemic stroke**
investigation of risk factors in children with arterial ischemic stroke (Ganesan et al) 2003;53:167
- Ataxia**
tremor and ataxia in fragile X premutation carriers: blinded videotape study (Berry-Kravis et al) 2003;53:616
- Ataxia, cerebellar**
do calcium channel autoantibodies cause cerebellar ataxia with Lambert-Eaton syndrome? (Fletcher and Lennon) 2003;53:5 (Editorial)
- Ataxia, Friedreich's**
cardiac energetics correlates to myocardial hypertrophy in Friedreich's ataxia (Bunse et al) 2003;53:121
- Atorvastatin**
statins induce angiogenesis, neurogenesis, and synaptogenesis after stroke (Chen et al) 2003;53:743
- ATP7A gene**
the promoter region of the Menkes gene ATP7A is not altered in focal or generalized dystonia (Berg et al) 2003;53:279 (Reply)
- the promoter region of the Menkes gene ATP7A is not altered in focal or generalized dystonia (Sibbing et al) 2003;53:278 (Letter)
- Attention deficit**
a direct prefrontal tract against distractibility in the human brain (Gaymard et al) 2003;53:542
- Auditory features, autosomal dominant partial epilepsy with**
epilepsy with auditory features: a LGII gene mutation suggests a loss-of-function mechanism (Pizzuti et al) 2003;53:396
- Auditory mismatch fields**
diminished auditory mismatch fields in dyslexic adults (Renwall and Hari) 2003;53:551
- Autism**
maternal neuronal antibodies associated with autism and a language disorder (Dalton et al) 2003;53:533
- mitochondrial dysfunction in autistic patients with 15q inverted duplication (Filipek et al) 2003;53:801
- Autoantibodies**
anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pittock et al) 2003;53:580
- do calcium channel autoantibodies cause cerebellar ataxia with Lambert-Eaton syndrome? (Fletcher and Lennon) 2003;53:5 (Editorial)
- mechanisms underlying cerebellar motor deficits due to mGluR1-autoantibodies (Coesmans et al) 2003;53:325
- the spectrum of autoimmune autonomic neuropathies (Klein et al) 2003;53:752
- Autoantigens**
autoantigen diversity in the opsoclonus-myoclonus syndrome (Bataller et al) 2003;53:347
- Autonomic neuropathy, autoimmune**
the spectrum of autoimmune autonomic neuropathies (Klein et al) 2003;53:752
- Autonomic neuropathy, hereditary**
indifference rather than insensitivity to pain (Klein et al) 2003;53:417 (Letter)

indifference rather than insensitivity to pain (Toscano et al) 2003;53:418 (Reply)

Autosomal dominant partial epilepsy with auditory features

epilepsy with auditory features: a *LGI1* gene mutation suggests a loss-of-function mechanism (Pizzati et al) 2003;53:396

Autosomal dominant progressive external ophthalmoplegia

the V368I mutation in Twinkle does not segregate with AdPEO (Arenas et al) 2003;53:278 (Letter)

Axonal degeneration

axonal injury within language network in primary progressive aphasia (Catani et al) 2003;53:242

blockers of sodium and calcium entry protect axons from nitric oxide-mediated degeneration (Kapoor et al) 2003; 53:174

nitric oxide and the axonal death cascade (Waxman) 2003;53:150 (Editorial)

Behavior changes

chronic hydrocephalus in rats and humans: white matter loss and behavior changes (Del Bigio et al) 2003;53: 337

Bilateral frontoparietal polymicrogyria

bilateral frontoparietal polymicrogyria: clinical and radiological features in 10 families with linkage to chromosome 16 (Chang et al) 2003;53:596

Bioenergetics

bioenergetic approaches for neuroprotection in Parkinson's disease (Beal) 2003;53:(suppl 3) S39

Bladder cancer

anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pitcock et al) 2003;53:580

Book reviews

Advances in Neurology Volume 90: Neurological Complications of Pregnancy, 2nd edition, edited by Hainline and Devinsky (Stern) 2003;53:549

Cerebrovascular Disease: 22nd Princeton Conference, edited by Chan (Wang) 2003;53:147

Clinical Neurology, by Hankey and Wardlaw (Rinn) 2003; 53:283

Diagnostic and Interventional Neuroradiology: A Multimodality Approach, edited by Sartor (Moo) 2003;53:147

Epilepsy Surgery: Case Studies and Commentaries, edited by Elisevich and Smith (Bourgeois) 2003;53:283

Genetics of Movement Disorders, edited by Pulst (Koeppen) 2003;53:827

Rudolf Magnus, Physiologist and Pharmacologist: A Biography, by Magnus (Cohen) 2003;53:422

Principles of Frontal Lobe Function, edited by Stuss and Knight (Geschwind) 2003;53:549

Rabies, by Jackson and Wunner (Johnson) 2003;53:422

Review of Sleep Medicine, edited by Bowman (Earley) 2003;53:690

Spinal Cord Medicine: Principles and Practice, by McDonald (McDonald) 2003;53:827

Structural and Molecular Basis of Skeletal Muscle Diseases, edited by Karpati (Wagner) 2003;53:690

Tumors of the Pediatric Central Nervous System, by Keating, Goodrich, and Packer (Johnston) 2003;53:550

Vitamin Responsive Conditions in Pediatric Neurology, edited by Baxter (Johnston) 2003;53:549

Brain-derived neurotrophic factor

lack of association between the BDNF Val66Met polymorphism and Parkinson's disease in a Swedish population (Håkansson et al) 2003;53:823 (Letter)

Brain ischemia

antiepileptic drugs as a possible neuroprotective strategy in brain ischemia (Calabresi et al) 2003;53:693

Brain malformations

functional organization of the brain with malformations of cortical development (Janszky et al) 2003;53:759

a new mutation of the *fukutin* gene in a non-Japanese patient (Silan et al) 2003;53:392

polymicrogyria and absence of pineal gland due to *PAX6* mutation (Mitchell et al) 2003;53:658

Brainstem syndrome

anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pitcock et al) 2003;53:580

Breast cancer

anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pitcock et al) 2003;53:580

Calcium channel autoantibodies

do calcium channel autoantibodies cause cerebellar ataxia with Lambert-Eaton syndrome? (Fletcher and Lennon) 2003;53:5 (Editorial)

Calcium channel blockers

blockers of sodium and calcium entry protect axons from nitric oxide-mediated degeneration (Kapoor et al) 2003; 53:174

Calcium channels

reduction of P/Q-type calcium channels in the postmortem cerebellum of paraneoplastic cerebellar degeneration with Lambert-Eaton myasthenic syndrome (Fukuda et al) 2003;53:21

Cancer

anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pitcock et al) 2003;53:580

[¹²³I]-2β-Carbomethoxy-3β-(4-iodophenyl)-N-(3-fluoropropyl)-nortropane

[¹²³I]-FP-CIT-SPECT demonstrates dopaminergic deficit in orthostatic tremor (Katzenschlager et al) 2003;53: 489

Carcinoma

anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pitcock et al) 2003;53:580

Cardiac energy metabolism

cardiac energetics correlates to myocardial hypertrophy in Friedreich's ataxia (Bunse et al) 2003;53:121

Caveolin-3

consequences of a novel caveolin-3 mutation in a large German family (Fischer et al) 2003;53:233

homozygous mutations in *caveolin-3* cause a severe form of rippling muscle disease (Kubisch et al) 2003;53:512

Cell cycle

gene profiling in spinal cord injury shows role of cell cycle neuronal death (Di Giovanni et al) 2003;53:454

Cell death

gene profiling in spinal cord injury shows role of cell cycle neuronal death (Di Giovanni et al) 2003;53:454

mitochondrial uncoupling protein-2 protects the immature brain from excitotoxic neuronal death (Sullivan et al) 2003;53:711

Cellular proliferation

markers of cellular proliferation are expressed in cortical tubers (Lee et al) 2003;53:668

Central nervous system

efficient central nervous system remyelination requires T cells (Bieber et al) 2003;53:680

- Cerebellar ataxia**
do calcium channel autoantibodies cause cerebellar ataxia with Lambert-Eaton syndrome? (Fletcher and Lennon) 2003;53:5 (Editorial)
- Cerebellar dysfunction, paraneoplastic**
the MAZ protein is an autoantigen of Hodgkin's disease and paraneoplastic cerebellar dysfunction (Bataller et al) 2003;53:123
- Cerebellar stroke**
decoupling of autonomic and cognitive emotional reactions after cerebellar stroke (Annoni et al) 2003;53:654
- Cerebellar syndrome**
anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pitcock et al) 2003;53:580
- Cerebellum**
reduction of P/Q-type calcium channels in the postmortem cerebellum of paraneoplastic cerebellar degeneration with Lambert-Eaton myasthenic syndrome (Fukuda et al) 2003;53:21
- Cerebral atrophy**
assessing the onset of structural change in familial Alzheimer's disease (Schott et al) 2003;53:181
- Cerebral metabolic rate of oxygen utilization (CMRO₂)**
magnetic resonance cerebral metabolic rate of oxygen utilization in hyperacute stroke patients (Lee et al) 2003;53:227
- Cerebrospinal fluid**
chemokines in serum and cerebrospinal fluid of Alzheimer's disease patients (Galimberti et al) 2003;53:547 (Letter)
- Cervical cancer**
anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pitcock et al) 2003;53:580
- Cervical dystonia, idiopathic**
diminished striatal [¹²³I]iodobenzovesamicol binding in idiopathic cervical dystonia (Albin et al) 2003;53:528
- Charcot-Marie-Tooth disease type 4A**
CMT4A: identification of a Hispanic GDAPI founder mutation (Boerkoel et al) 2003;53:400
- Chemokines**
chemokines in serum and cerebrospinal fluid of Alzheimer's disease patients (Galimberti et al) 2003;53:547 (Letter)
- Childhood stroke**
investigation of risk factors in children with arterial ischemic stroke (Ganesan et al) 2003;53:167
risk factors for childhood stroke: little folks have different strokes! (deVeber) 2003;53:149 (Editorial)
- Chromosome 1q23**
familial hemiplegic migraine type 2 is linked to 0.9Mb region on chromosome 1q23 (Marconi et al) 2003;53:376
- Chromosome 15q**
mitochondrial dysfunction in autistic patients with 15q inverted duplication (Filipek et al) 2003;53:801
- Chromosome 16**
bilateral frontoparietal polymicrogyria: clinical and radiological features in 10 families with linkage to chromosome 16 (Chang et al) 2003;53:596
- Cigarette smoking**
coffee drinking, cigarette smoking, and Parkinson's disease (Hernán et al) 2003;53:546 (Reply)
coffee drinking, cigarette smoking, and Parkinson's disease (James) 2003;53:546 (Letter)
- Clinical trials**
designing neuroprotective trials in Parkinson's disease (Kieburtz) 2003;53:(suppl 3) S100
- Coffee drinking**
coffee drinking, cigarette smoking, and Parkinson's disease (Hernán et al) 2003;53:546 (Reply)
coffee drinking, cigarette smoking, and Parkinson's disease (James) 2003;53:546 (Letter)
- Cognitive deficits**
environmental enrichment reverses cognitive and molecular deficits induced by developmental lead exposure (Guilarte et al) 2003;53:50
- homocysteine, white matter hyperintensities, and cognition in healthy elderly people (Dufouil et al) 2003;53:214
- plasma and cerebrospinal fluid α 1-antichymotrypsin levels in Alzheimer's disease: correlation with cognitive impairment (DeKosky et al) 2003;53:81
- Collapsin response mediator protein 4 (CRMP4)**
markers of cellular proliferation are expressed in cortical tubers (Lee et al) 2003;53:668
- Color-coded sonography, transcranial**
effect of ultrasound on thrombolysis of middle cerebral artery occlusion during thrombolytic therapy with transcranial color-coded sonography (Eggers et al) 2003;53:797
- Complex I**
is the mitochondrial complex I ND5 gene a hot-spot for MELAS causing mutations? (Lirolta et al) 2003;53:128
suppression of complex I gene expression induces optic neuropathy (Qi et al) 2003;53:198
- Congenital muscular dystrophy**
a new mutation of the *fukutin* gene in a non-Japanese patient (Silan et al) 2003;53:392
- Cortical malformations**
cortical anomalies associated with visuospatial processing deficits (Isaacs et al) 2003;53:768
functional organization of the brain with malformations of cortical development (Janszky et al) 2003;53:759
- Cortical tubers**
markers of cellular proliferation are expressed in cortical tubers (Lee et al) 2003;53:668
- Cramp, writer's**
temporal processing of visuotactile and tactile stimuli in writer's cramp (Fiorio et al) 2003;53:630
- Cranial neuropathy**
anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pitcock et al) 2003;53:580
- Creatine**
additive neuroprotective effects of minocycline with creatine in a mouse model of ALS (Zhang et al) 2003;53:267
lack of creatine in muscle and brain in an adult with GAMT deficiency (Schulze et al) 2003;53:248
- a randomized sequential trial of creatine in amyotrophic lateral sclerosis (Groeneveld et al) 2003;53:437
- Creutzfeldt-Jakob disease, sporadic**
quinacrine-induced cytolytic hepatitis in sporadic Creutzfeldt-Jakob disease (Scoazec et al) 2003;53:546 (Letter)
- Cushing's syndrome**
meningioma presenting with Cushing's syndrome: an unusual clinical presentation (Giraldi et al) 2003;53:138
- Cyclophosphamide**
"rebooting" the immune system with cyclophosphamide: taking risks for a "cure"? (Lewis and Lisak) 2003;53:7 (Editorial)
treatment of refractory myasthenia: "rebooting" with high-dose cyclophosphamide (Drachman et al) 2003;53:29

ddC

FK506 is neuroprotective in a model of antiretroviral toxic neuropathy (Keswani et al) 2003;53:57

Dementia

endogenous estradiol and risk of dementia in women and men: the Rotterdam study (Geerlings et al) 2003;53:607

Dementia, familial

familial dementia with dentate atrophy and failure of neurogenesis (Hudson and Munoz) 2003;53:420 (Letter)

familial dementia with dentate atrophy and failure of neurogenesis (Song et al) 2003;53:421 (Reply)

Dementia, frontotemporal

a novel L266V mutation of the tau gene causes frontotemporal dementia with a unique tau pathology (Kobayashi et al) 2003;53:133

Dentate atrophy

familial dementia with dentate atrophy and failure of neurogenesis (Hudson and Munoz) 2003;53:420 (Letter)

familial dementia with dentate atrophy and failure of neurogenesis (Song et al) 2003;53:421 (Reply)

Developmental lead exposure

environmental enrichment reverses cognitive and molecular deficits induced by developmental lead exposure (Guilarte et al) 2003;53:50

Disgust

an attention modulated response to disgust in human ventral anterior insula (Krolak-Salmon et al) 2003;53:446

disgust discussed (Calder) 2003;53:427 (Editorials)

Distractibility

a direct prefrontal tract against distractibility in the human brain (Gaymard et al) 2003;53:542

Dopamine

endogenous dopamine release after pharmacological challenges in Parkinson's disease (Piccini et al) 2003;53:647

[¹²³I]-FP-CIT-SPECT demonstrates dopaminergic deficit in orthostatic tremor (Katzenbach et al) 2003;53:489 toward full restoration of synaptic and terminal function of the dopaminergic system in Parkinson's disease by stem cells (Isaacson et al) 2003;53:(suppl 3) S135

Dopamine agonists

dopamine agonists and Parkinson's disease progression: what can we learn from neuroimaging studies (Marek et al) 2003;53:(suppl 3) S160

rationale for the use of dopamine agonists as neuroprotective agents in Parkinson's disease (Schapira and Olanow) 2003;53:(suppl 3) S149

Doublecortin (DCX)

markers of cellular proliferation are expressed in cortical tubers (Lee et al) 2003;53:668

Downbeat nystagmus

clinical significance of positionally induced downbeat nystagmus (Leigh) 2003;53:688 (Letter)

Drug resistance

a novel mechanism underlying drug resistance in chronic epilepsy (Remy et al) 2003;53:469

Drugs, antiepileptic

antiepileptic drugs as a possible neuroprotective strategy in brain ischemia (Calabresi et al) 2003;53:693

Duplications

mitochondrial dysfunction in autistic patients with 15q inverted duplication (Filipek et al) 2003;53:801

Dyslexia

diminished auditory mismatch fields in dyslexic adults (Renvall and Hari) 2003;53:551

Dystonia

pallidal neuronal activity: implications for models of dystonia (Hutchison et al) 2003;53:480

Dystonia, cervical

diminished striatal [¹²³I]iodobenzovesamicol binding in idiopathic cervical dystonia (Albin et al) 2003;53:528

Dystonia, DYT1

toward therapy for DYT1 dystonia: allele-specific silencing of mutant TorsinA (Gonzalez-Alegre et al) 2003;53:781

Dystonia, focal or generalized

the promoter region of the Menkes gene *ATP7A* is not altered in focal or generalized dystonia (Berg et al) 2003;53:279 (Reply)

the promoter region of the Menkes gene *ATP7A* is not altered in focal or generalized dystonia (Sibbing et al) 2003;53:278 (Letter)

Dystonia, hand

temporal processing of visuotactile and tactile stimuli in writer's cramp (Fiorio et al) 2003;53:630

Editorials

disgust discussed (Calder) 2003;53:427

do calcium channel autoantibodies cause cerebellar ataxia with Lambert-Eaton syndrome? (Fletcher and Lennon) 2003;53:5

implications of neuroimaging for the treatment of epilepsy (Theodore) 2003;53:286

message from the editor (Johnson) 2003;53:1

of mice and men: reconciling preclinical ALS mouse studies and human clinical trials (Rothstein) 2003;53:423

neuroprotection for Parkinson's disease: prospects and promises (Olanow) 2003;53:(suppl 3) S1

nitric oxide and the axonal death cascade (Waxman) 2003;53:150

poliomyelitis and flaviviruses (Johnson and Cornblath) 2003;53:691

progesterone, neurosteroids, and the hormonal basis of catamenial epilepsy (Rogawski) 2003;53:288

"rebooting" the immune system with cyclophosphamide: taking risks for a "cure"? (Lewis and Lisak) 2003;53:7

risk factors for childhood stroke: little folks have different strokes! (deVeber) 2003;53:149

treating psychogenic nonepileptic seizures: easier said than done (Lesser) 2003;53:285

Elderly

homocysteine, white matter hyperintensities, and cognition in healthy elderly people (Dufouil et al) 2003;53:214

Electroencephalography

functional magnetic resonance imaging of human absence seizures (Salek-Haddadi et al) 2003;53:663

slowing of electroencephalogram in rapid eye movement sleep behavior disorder (Fantini et al) 2003;53:774

Emotional reactions

an attention modulated response to disgust in human ventral anterior insula (Krolak-Salmon et al) 2003;53:446

decoupling of autonomic and cognitive emotional reactions after cerebellar stroke (Annoni et al) 2003;53:654

disgust discussed (Calder) 2003;53:427 (Editorials)

Encephalitis

human herpesvirus-6 encephalitis associated with hypersensitivity syndrome (Descamps et al) 2003;53:280 (Letter)

Encephalopathy

anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pitcock et al) 2003;53:580

a new leukodystrophy with brainstem and spinal cord involvement and high lactate (van der Knaap et al) 2003;53:252

Encephalopathy, lipid

apolipoprotein C-II deficiency presenting as a lipid encephalopathy in early infancy (Wilson et al) 2003;53:807

Endothelial dysfunction

endothelial dysfunction precedes C-fiber abnormalities in primary (AL) amyloidosis (Berghoff et al) 2003;53:725

Endothelin-1

influence of red wine on visual function and endothelin-1 plasma level in a patient with optic neuritis (Haufschmid et al) 2003;53:825 (Letter)

Energy metabolism

cardiac energetics correlates to myocardial hypertrophy in Friedreich's ataxia (Bunse et al) 2003;53:121

Environmental enrichment

environmental enrichment reverses cognitive and molecular deficits induced by developmental lead exposure (Gultarte et al) 2003;53:50

Environmental factors

genetic and environmental factors in the cause of Parkinson's disease (Warner et al) 2003;53:(suppl 3) S16

Epilepsy

epilepsy after early-life seizures can be independent of hippocampal injury (Raol et al) 2003;53:503

progressive neocortical damage in epilepsy (Liu et al) 2003;53:312

Epilepsy, autosomal dominant partial

epilepsy with auditory features: a *LGI1* gene mutation suggests a loss-of-function mechanism (Pizzati et al) 2003;53:396

Epilepsy, catamenial

progesterone, neurosteroids, and the hormonal basis of catamenial epilepsy (Rogawski) 2003;53:288 (Editorial)

Epilepsy, chronic

a novel mechanism underlying drug resistance in chronic epilepsy (Remy et al) 2003;53:469

Epilepsy, temporal lobe

prodynorphin gene promoter polymorphism and temporal lobe epilepsy (Stögemann et al) 2003;53:281 (Reply)

prodynorphin gene promoter polymorphism and temporal lobe epilepsy (Tilgen et al) 2003;53:280 (Letter)

Epilepsy, treatment

implications of neuroimaging for the treatment of epilepsy (Theodore) 2003;53:286 (Editorial)

Estradiol

endogenous estradiol and risk of dementia in women and men: the Rotterdam study (Geerlings et al) 2003;53:607

Excitability

motor cortex excitability in Alzheimer's disease: a transcranial magnetic stimulation study (Ferreri et al) 2003;53:102

motor cortex hyperexcitability to transcranial magnetic stimulation in Alzheimer's disease: evidence of impaired glutamatergic neurotransmission? (Di Lazzaro et al) 2003;53:823 (Letter)

motor cortex hyperexcitability to transcranial magnetic stimulation in Alzheimer's disease: evidence of impaired glutamatergic neurotransmission? (Rossini et al) 2003;53:824 (Reply)

Excitotoxicity

interleukin-1 β promotes oligodendrocyte death through glutamate excitotoxicity (Takahashi et al) 2003;53:588

mitochondrial uncoupling protein-2 protects the immature brain from excitotoxic neuronal death (Sullivan et al) 2003;53:711

Exercise

regular exercise is beneficial to a mouse model of amyotrophic lateral sclerosis (Kirkinezos et al) 2003;53:804

Eye anomalies

a new mutation of the *fukutin* gene in a non-Japanese patient (Silan et al) 2003;53:392

Familial Alzheimer's disease

assessing the onset of structural change in familial Alzheimer's disease (Schott et al) 2003;53:181

Familial dementia

familial dementia with dentate atrophy and failure of neurogenesis (Hudson and Munoz) 2003;53:420 (Letter)

familial dementia with dentate atrophy and failure of neurogenesis (Song et al) 2003;53:421 (Reply)

Familial hemiplegic migraine type 2

familial hemiplegic migraine type 2 is linked to 0.9Mb region on chromosome 1q23 (Marconi et al) 2003;53:376

Fc γ receptors

anti-GM1 IgG antibodies induce leukocyte effector functions via Fc γ receptors (van Sorge et al) 2003;53:570

FK506

FK506 is neuroprotective in a model of antiretroviral toxic neuropathy (Keswani et al) 2003;53:57

FKRP gene

phenotypic spectrum associated with mutations in the fukutin-related protein gene (Mercuri et al) 2003;53:537

Flaviviruses

poliomylitis and flaviviruses (Johnson and Cornblath) 2003;53:691 (Editorial)

Fragile X premutation carriers

tremor and ataxia in fragile X premutation carriers: blinded videotape study (Berry-Kravis et al) 2003;53:616

Friedreich's ataxia

cardiac energetics correlates to myocardial hypertrophy in Friedreich's ataxia (Bunse et al) 2003;53:121

Frontoparietal polymicrogyria, bilateral

bilateral frontoparietal polymicrogyria: clinical and radiological features in 10 families with linkage to chromosome 16 (Chang et al) 2003;53:596

fukutin gene

a new mutation of the *fukutin* gene in a non-Japanese patient (Silan et al) 2003;53:392

Fukutin-related protein gene (FKRP)

phenotypic spectrum associated with mutations in the fukutin-related protein gene (Mercuri et al) 2003;53:537

Ganglioside GM1

anti-GM1 IgG antibodies induce leukocyte effector functions via Fc γ receptors (van Sorge et al) 2003;53:570

Ganglioside-induced differentiation-associated protein 1 gene (GDPAP)

CMT4A: identification of a Hispanic *GDPAP* founder mutation (Boerkel et al) 2003;53:400

Gene polymorphisms

lack of association between the BDNF Val66Met polymorphism and Parkinson's disease in a Swedish population (Häkansson et al) 2003;53:823 (Letter)

phenotype modulators in myophosphorylase deficiency (Martinuzzi et al) 2003;53:497

PRNP Val129 homozygosity increases risk for early-onset Alzheimer's disease (Dermaut et al) 2003;53:409

- prodynorphin gene promoter polymorphism and temporal lobe epilepsy (Stögemann et al) 2003;53:281 (Reply)
 prodynorphin gene promoter polymorphism and temporal lobe epilepsy (Tilgen et al) 2003;53:280 (Letter)
- Gene profiling**
 gene profiling in spinal cord injury shows role of cell cycle neuronal death (Di Giovanni et al) 2003;53:454
- Gene therapy**
 in vivo gene delivery of glial cell line-derived neurotrophic factor for Parkinson's disease (Kordower) 2003;53:(suppl 3) S120
- Genetics**
 genetic and environmental factors in the cause of Parkinson's disease (Warner et al) 2003;53:(suppl 3) S16
- Germans**
 consequences of a novel caveolin-3 mutation in a large German family (Fischer et al) 2003;53:233
- Giant cells**
 markers of cellular proliferation are expressed in cortical tubers (Lee et al) 2003;53:668
- Glial cell line-derived neurotrophic factor**
 in vivo gene delivery of glial cell line-derived neurotrophic factor for Parkinson's disease (Kordower) 2003;53:(suppl 3) S120
- Glioma**
 continuous growth of mean tumor diameter in a subset of grade II gliomas (Mandonnet et al) 2003;53:524
- Globus pallidus**
 pallidal neuronal activity: implications for models of dystonia (Hutchison et al) 2003;53:480
 randomized trial of pallidotomy versus medical therapy for Parkinson's disease (Vitek et al) 2003;53:558
- Glucose, extracellular**
 correlation between extracellular glucose and seizure susceptibility in adult rats (Schwechter et al) 2003;53:91
- Glutamate**
 interleukin-1 β promotes oligodendrocyte death through glutamate excitotoxicity (Takahashi et al) 2003;53:588
 motor cortex hyperexcitability to transcranial magnetic stimulation in Alzheimer's disease: evidence of impaired glutamatergic neurotransmission? (Di Lazzaro et al) 2003;53:823 (Letter)
 motor cortex hyperexcitability to transcranial magnetic stimulation in Alzheimer's disease: evidence of impaired glutamatergic neurotransmission? (Rossini et al) 2003;53:824 (Reply)
- Glutamate receptor type I, metabotropic**
 mechanisms underlying cerebellar motor deficits due to mGluR1-autoantibodies (Coesmans et al) 2003;53:325
- Growth factors**
 cerebral neurogenesis is induced by intranasal administration of growth factors (Jin et al) 2003;53:405
- Guanidinoacetate methyltransferase deficiency**
 lack of creatine in muscle and brain in an adult with GAMT deficiency (Schulze et al) 2003;53:248
- Guillain-Barré syndrome**
 anti-GM1 IgG antibodies induce leukocyte effector functions via Fc γ receptors (van Sorge et al) 2003;53:570
- Hand dystonia, focal**
 temporal processing of visuotactile and tactile stimuli in writer's cramp (Fiorio et al) 2003;53:630
- Head cooling**
 head cooling with mild systemic hypothermia in anesthetized piglets is neuroprotective (Tooley et al) 2003;53:65
- Headache**
 headache as a presenting symptom in hereditary hemochromatosis (Hagen et al) 2003;53:145 (Reply)
 headache as a presenting symptom in hereditary hemochromatosis (McCune et al) 2003;53:145 (Letter)
- Hearing loss, sudden**
 healthy-side dominance of cortical neuromagnetic responses evoked by monaural stimulation in patients with sudden hearing loss (Li et al) 2003;53:810
- Hemiplegic migraine, familial**
 familial hemiplegic migraine type 2 is linked to 0.9Mb region on chromosome 1q23 (Marconi et al) 2003;53:376
- Hemochromatosis, hereditary**
 headache as a presenting symptom in hereditary hemochromatosis (Hagen et al) 2003;53:145 (Reply)
 headache as a presenting symptom in hereditary hemochromatosis (McCune et al) 2003;53:145 (Letter)
- Hemorrhage, intracerebral**
 intracerebral hemorrhage induces macrophage activation and matrix metalloproteinases (Power et al) 2003;53:731
- Hepatitis**
 quinacrine-induced cytolytic hepatitis in sporadic Creutzfeldt-Jakob disease (Scoazec et al) 2003;53:546 (Letter)
- Hereditary hemochromatosis**
 headache as a presenting symptom in hereditary hemochromatosis (Hagen et al) 2003;53:145 (Reply)
 headache as a presenting symptom in hereditary hemochromatosis (McCune et al) 2003;53:145 (Letter)
- Hereditary sensory and autonomic neuropathy type V**
 indifference rather than insensitivity to pain (Klein et al) 2003;53:417 (Letter)
 indifference rather than insensitivity to pain (Toscano et al) 2003;53:418 (Reply)
- Hereditary spastic paraparesis**
 an *ALS2* gene mutation causes hereditary spastic paraparesis in a Pakistani kindred (Gros-Louis et al) 2003;53:144 (Letter)
- Hippocampal injury**
 epilepsy after early-life seizures can be independent of hippocampal injury (Raol et al) 2003;53:503
- Hippocampal sclerosis**
 hippocampal sclerosis is a progressive disorder: a longitudinal volumetric MRI study (Fuerst et al) 2003;53:413
- Hippocampus**
 altered hippocampal muscarinic receptors in acetylcholinesterase-deficient mice (Volpicelli-Daley et al) 2003;53:788
- Hispanics**
 CMT4A: identification of a Hispanic *GDAP1* founder mutation (Boerkoel et al) 2003;53:400
- History**
 history of the American Neurological Association in celebration of the 125th anniversary: *tempus et hora: time and the hour*: forward (Goetz) 2003;53:(suppl 4) S1
 history of the American Neurological Association in celebration of the 125th anniversary: *tempus et hora: time and the hour*: PART 1: the history of 19th century neurology and the American Neurological Association (Goetz et al) 2003;53:(suppl 4) S2
 history of the American Neurological Association in celebration of the 125th anniversary: *tempus et hora: time and the hour*: PART 2: history of 20th century neurology: decade by decade (Tyler et al) 2003;53:(suppl 4) S27

Hodgkin's disease

the MAZ protein is an autoantigen of Hodgkin's disease and paraneoplastic cerebellar dysfunction (Bataller et al) 2003;53:123

Homocysteine

homocysteine, white matter hyperintensities, and cognition in healthy elderly people (Dufouil et al) 2003;53:214

HuD

markers of cellular proliferation are expressed in cortical tubers (Lee et al) 2003;53:668

Human herpesvirus-6

cross-reactivity with myelin basic protein and human herpesvirus-6 in multiple sclerosis (Tejada-Simon et al) 2003;53:189

human herpesvirus-6 encephalitis associated with hypersensitivity syndrome (Descamps et al) 2003;53:280 (Letter)

Hydrocephalus, chronic

chronic hydrocephalus in rats and humans: white matter loss and behavior changes (Del Bigio et al) 2003;53:337

3-Hydroxy-3-methyl-glutaryl-coenzyme A (HMG-CoA reductase inhibitors)

statins induce angiogenesis, neurogenesis, and synaptogenesis after stroke (Chen et al) 2003;53:743

Hyperacute stroke

magnetic resonance cerebral metabolic rate of oxygen utilization in hyperacute stroke patients (Lee et al) 2003;53:227

Hyperexcitability

motor cortex hyperexcitability to transcranial magnetic stimulation in Alzheimer's disease: evidence of impaired glutamatergic neurotransmission? (Di Lazzaro et al) 2003;53:823 (Letter)

motor cortex hyperexcitability to transcranial magnetic stimulation in Alzheimer's disease: evidence of impaired glutamatergic neurotransmission? (Rossini et al) 2003;53:824 (Reply)

Hyperglycemia, neonatal

concerns regarding transience and heterozygosity in neonatal hyperglycemia (Hamosh and Van Hove) 2003;53:685 (Letter)

concerns regarding transience and heterozygosity in neonatal hyperglycemia (Kure et al) 2003;53:685 (Reply)

Hypersensitivity syndrome

human herpesvirus-6 encephalitis associated with hypersensitivity syndrome (Descamps et al) 2003;53:280 (Letter)

Hypothermia

head cooling with mild systemic hypothermia in anesthetized piglets is neuroprotective (Tooley et al) 2003;53:65

Immune system

neurotrophic cross-talk between the nervous and immune systems: implications for neurological diseases (Kerschensteiner et al) 2003;53:292

Immunoglobulin G

anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pittock et al) 2003;53:580

anti-GM1 IgG antibodies induce leukocyte effector functions via Fc γ receptors (van Sorge et al) 2003;53:570

Immunoglobulin M

intrathecal IgM synthesis is a prognostic factor in multiple sclerosis (Villar et al) 2003;53:222

Infancy, early

apolipoprotein C-II deficiency presenting as a lipid encephalopathy in early infancy (Wilson et al) 2003;53:807

Infection, West Nile virus

asymmetric flaccid paralysis: a neuromuscular presentation of West Nile virus infection (Li et al) 2003;53:703

Injury, hippocampal

epilepsy after early-life seizures can be independent of hippocampal injury (Raol et al) 2003;53:503

Injury, spinal cord

gene profiling in spinal cord injury shows role of cell cycle neuronal death (Di Giovanni et al) 2003;53:454

Interferon β 1a

validation of diagnostic magnetic resonance imaging criteria for multiple sclerosis and response to interferon β 1a (Barkhof et al) 2003;53:718

Interictal spiking, periodic

epileptiform ictal discharges are prevented by periodic interictal spiking in the olfactory cortex (Librizzi and de Curtis) 2003;53:382

Interleukin-1 β

interleukin-1 β promotes oligodendrocyte death through glutamate excitotoxicity (Takahashi et al) 2003;53:588

Intracerebral hemorrhage

intracerebral hemorrhage induces macrophage activation and matrix metalloproteinases (Power et al) 2003;53:731

[123 I]Iodobenzovesamicol

diminished striatal [123 I]iodobenzovesamicol binding in idiopathic cervical dystonia (Albin et al) 2003;53:528

Ischemia, brain

antiepileptic drugs as a possible neuroprotective strategy in brain ischemia (Calabresi et al) 2003;53:693

Ischemic stroke

investigation of risk factors in children with arterial ischemic stroke (Ganesan et al) 2003;53:167

JC virus

lineage pathway of human brain progenitor cells identified by JC virus susceptibility (Messam et al) 2003;53:636

Juvenile Alzheimer's disease

atypical focal MRI lesions in a case of juvenile Alzheimer's disease (Probst et al) 2003;53:118

Lactate

a new leukodystrophy with brainstem and spinal cord involvement and high lactate (van der Knaap et al) 2003;53:252

Lambert-Eaton myasthenic syndrome

anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pittock et al) 2003;53:580

do calcium channel autoantibodies cause cerebellar ataxia with Lambert-Eaton syndrome? (Fletcher and Lennon) 2003;53:5 (Editorial)

oculobulbar involvement is typical with Lambert-Eaton myasthenic syndrome (Burns et al) 2003;53:270

reduction of P/Q-type calcium channels in the postmortem cerebellum of paraneoplastic cerebellar degeneration with Lambert-Eaton myasthenic syndrome (Fukuda et al) 2003;53:21

Language disorders

maternal neuronal antibodies associated with autism and a language disorder (Dalton et al) 2003;53:533

Language networks

axonal injury within language network in primary progressive aphasia (Catani et al) 2003;53:242

- primary progressive aphasia: PPA and the language network (Sonty et al) 2003;53:35
- Lateral geniculate nucleus**
human lateral geniculate nucleus and visual cortex respond to screen flicker (Krolak-Salmon et al) 2003;53:73
- Lead exposure, developmental**
environmental enrichment reverses cognitive and molecular deficits induced by developmental lead exposure (Guilarte et al) 2003;53:50
- Leucine-rich glioma inactivated gene *LGII***
epilepsy with auditory features: a *LGII* gene mutation suggests a loss-of-function mechanism (Pizzati et al) 2003;53:396
- Leukocytes**
anti-GM1 IgG antibodies induce leukocyte effector functions via Fc γ receptors (van Sorge et al) 2003;53:570
- Leukodystrophy**
a new leukoencephalopathy with brainstem and spinal cord involvement and high lactate (van der Knaap et al) 2003;53:252
- Leukoencephalopathy**
a new leukodystrophy with brainstem and spinal cord involvement and high lactate (van der Knaap et al) 2003;53:252
- LGII* gene**
epilepsy with auditory features: a *LGII* gene mutation suggests a loss-of-function mechanism (Pizzati et al) 2003;53:396
- Lineage pathways**
lineage pathway of human brain progenitor cells identified by JC virus susceptibility (Messam et al) 2003;53:636
- Lipid encephalopathy**
apolipoprotein C-II deficiency presenting as a lipid encephalopathy in early infancy (Wilson et al) 2003;53:807
- Lung carcinoma**
anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pitcock et al) 2003;53:580
- Macrophage metalloelastase**
intracerebral hemorrhage induces macrophage activation and matrix metalloproteinases (Power et al) 2003;53:731
- Magnetic resonance imaging**
atypical focal MRI lesions in a case of juvenile Alzheimer's disease (Probst et al) 2003;53:118
hippocampal sclerosis is a progressive disorder: a longitudinal volumetric MRI study (Fuerst et al) 2003;53:413
magnetic resonance imaging and neurosphere therapy of stroke in rat (Zhang et al) 2003;53:259
new T2 lesions enable an earlier diagnosis of multiple sclerosis in clinically isolated syndromes (Dalton et al) 2003;53:673
validation of diagnostic magnetic resonance imaging criteria for multiple sclerosis and response to interferon β 1a (Barkhof et al) 2003;53:718
- Magnetic resonance imaging, functional**
functional magnetic resonance imaging of human absence seizures (Salek-Haddadi et al) 2003;53:663
- Magnetic resonance-measured cerebral metabolic rate of oxygen utilization (MR-CMRO₂)**
magnetic resonance cerebral metabolic rate of oxygen utilization in hyperacute stroke patients (Lee et al) 2003;53:227
- Magnetic resonance spectroscopy, proton (¹H-MRS)**
axonal injury within language network in primary progressive aphasia (Catani et al) 2003;53:242
- Magnetic stimulation, transcranial**
motor cortex excitability in Alzheimer's disease: a transcranial magnetic stimulation study (Ferreri et al) 2003;53:102
motor cortex hyperexcitability to transcranial magnetic stimulation in Alzheimer's disease: evidence of impaired glutamatergic neurotransmission? (Di Lazzaro et al) 2003;53:823 (Letter)
motor cortex hyperexcitability to transcranial magnetic stimulation in Alzheimer's disease: evidence of impaired glutamatergic neurotransmission? (Rossini et al) 2003;53:824 (Reply)
transient suppression of tinnitus by transcranial magnetic stimulation (Plewnia et al) 2003;53:263
- Magnetoencephalography**
healthy-side dominance of cortical neuromagnetic responses evoked by monaural stimulation in patients with sudden hearing loss (Li et al) 2003;53:810
- Maternal antibodies**
maternal neuronal antibodies associated with autism and a language disorder (Dalton et al) 2003;53:533
- Matrix metalloproteinase MMP-12**
intracerebral hemorrhage induces macrophage activation and matrix metalloproteinases (Power et al) 2003;53:731
- MAZ protein**
the MAZ protein is an autoantigen of Hodgkin's disease and paraneoplastic cerebellar dysfunction (Bataller et al) 2003;53:123
- McArdle's disease**
phenotype modulators in myophosphorylase deficiency (Martinuzzi et al) 2003;53:497
- MELAS (mitochondrial encephalomyopathy with lactic acidosis and stroke-like episodes)**
is the mitochondrial complex I ND5 gene a hot-spot for MELAS causing mutations? (Liolitsa et al) 2003;53:128
- Meningioma**
meningioma presenting with Cushing's syndrome: an unusual clinical presentation (Giraldi et al) 2003;53:138
- Menkes gene ATP7A**
the promoter region of the Menkes gene *ATP7A* is not altered in focal or generalized dystonia (Berg et al) 2003;53:279 (Reply)
the promoter region of the Menkes gene *ATP7A* is not altered in focal or generalized dystonia (Sibbing et al) 2003;53:278 (Letter)
- Microcirculatory dysfunction**
endothelial dysfunction precedes C-fiber abnormalities in primary (AL) amyloidosis (Berghoff et al) 2003;53:725
- Middle cerebral artery occlusion**
effect of ultrasound on thrombolysis of middle cerebral artery occlusion during thrombolytic therapy with transcranial color-coded sonography (Eggers et al) 2003;53:797
- Migraine, familial hemiplegic**
familial hemiplegic migraine type 2 is linked to 0.9Mb region on chromosome 1q23 (Marconi et al) 2003;53:376
- Minocycline**
additive neuroprotective effects of minocycline with creatine in a mouse model of ALS (Zhang et al) 2003;53:267

intracerebral hemorrhage induces macrophage activation and matrix metalloproteinases (Power et al) 2003;53:731

Mismatch fields

diminished auditory mismatch fields in dyslexic adults (Renwall and Hari) 2003;53:551

Mitochondrial dysfunction

is there mitochondrial dysfunction in amyotrophic lateral sclerosis skeletal muscle? (Echaniz-Laguna et al) 2003;53:687 (Reply)

is there mitochondrial dysfunction in amyotrophic lateral sclerosis skeletal muscle? (Vielhaber et al) 2003;53:686 (Letter)

mitochondrial dysfunction in autistic patients with 15q inverted duplication (Filipek et al) 2003;53:801

Mitochondrial encephalomyopathy with lactic acidosis and stroke-like episodes (MELAS)

is the mitochondrial complex I ND5 gene a hot-spot for MELAS causing mutations? (Liolitsa et al) 2003;53:128

Mitochondrial uncoupling

mitochondrial uncoupling protein-2 protects the immature brain from excitotoxic neuronal death (Sullivan et al) 2003;53:711

Molecular deficits

environmental enrichment reverses cognitive and molecular deficits induced by developmental lead exposure (Gualtieri et al) 2003;53:50

Motor cortex excitability

motor cortex excitability in Alzheimer's disease: a transcranial magnetic stimulation study (Ferreri et al) 2003;53:102

motor cortex hyperexcitability to transcranial magnetic stimulation in Alzheimer's disease: evidence of impaired glutamatergic neurotransmission? (Di Lazzaro et al) 2003;53:823 (Letter)

motor cortex hyperexcitability to transcranial magnetic stimulation in Alzheimer's disease: evidence of impaired glutamatergic neurotransmission? (Rossini et al) 2003;53:824 (Reply)

Motor deficits

mechanisms underlying cerebellar motor deficits due to mGluR1-autoantibodies (Coesmans et al) 2003;53:325

motor cortex excitability in Alzheimer's disease: a transcranial magnetic stimulation study (Ferreri et al) 2003;53:102

Motor memory

age-dependent changes in the ability to encode a novel elementary motor memory (Sawaki et al) 2003;53:521

Movement disorders

anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pittock et al) 2003;53:580

MR-CMRO₂ (magnetic resonance-measured cerebral metabolic rate of oxygen utilization)

magnetic resonance cerebral metabolic rate of oxygen utilization in hyperacute stroke patients (Lee et al) 2003;53:227

Multiple sclerosis, analysis

cross-reactivity with myelin basic protein and human herpesvirus-6 in multiple sclerosis (Tejada-Simon et al) 2003;53:189

elevated osteopontin levels are associated with disease activity in relapsing-remitting multiple sclerosis patients (Vogt et al) 2003;53:818

Multiple sclerosis, diagnosis

new T2 lesions enable an earlier diagnosis of multiple sclerosis in clinically isolated syndromes (Dalton et al) 2003;53:673

validation of diagnostic magnetic resonance imaging criteria for multiple sclerosis and response to interferon β 1a (Barkhof et al) 2003;53:718

Multiple sclerosis, prognosis

intrathecal IgM synthesis is a prognostic factor in multiple sclerosis (Villar et al) 2003;53:222

Muscarinic receptors

altered hippocampal muscarinic receptors in acetylcholinesterase-deficient mice (Volpicelli-Daley et al) 2003;53:788

Muscle, rippling

homozygous mutations in *caveolin-3* cause a severe form of rippling muscle disease (Kubisch et al) 2003;53:512

Muscle, skeletal

is there mitochondrial dysfunction in amyotrophic lateral sclerosis skeletal muscle? (Echaniz-Laguna et al) 2003;53:687 (Reply)

is there mitochondrial dysfunction in amyotrophic lateral sclerosis skeletal muscle? (Vielhaber et al) 2003;53:686 (Letter)

Muscular dystrophy, congenital

a new mutation of the *fukutin* gene in a non-Japanese patient (Silan et al) 2003;53:392

Mutations

an *ALS2* gene mutation causes hereditary spastic paraparesia in a Pakistani kindred (Gros-Louis et al) 2003;53:144 (Letter)

apolipoprotein C-II deficiency presenting as a lipid encephalopathy in early infancy (Wilson et al) 2003;53:807

CMT4A: identification of a Hispanic *GDAPI* founder mutation (Boerkel et al) 2003;53:400

consequences of a novel *caveolin-3* mutation in a large German family (Fischer et al) 2003;53:233

efficient three-drug cocktail for disease induced by mutant superoxide dismutase (Kriz et al) 2003;53:429

epilepsy with auditory features: a *LGII* gene mutation suggests a loss-of-function mechanism (Pizzuti et al) 2003;53:396

homozygous mutations in *caveolin-3* cause a severe form of rippling muscle disease (Kubisch et al) 2003;53:512

indifference rather than insensitivity to pain (Klein et al) 2003;53:417 (Letter)

indifference rather than insensitivity to pain (Toscano et al) 2003;53:418 (Reply)

is the mitochondrial complex I ND5 gene a hot-spot for MELAS causing mutations? (Liolitsa et al) 2003;53:128

a new case of pyruvate dehydrogenase deficiency due to a novel mutation in the *PDX1* gene (Dey et al) 2003;53:273

a new mutation of the *fukutin* gene in a non-Japanese patient (Silan et al) 2003;53:392

a novel L266V mutation of the tau gene causes frontotemporal dementia with a unique tau pathology (Kobayashi et al) 2003;53:133

N19S, a novel single base substitution in the *SOD1* gene in sporadic amyotrophic lateral sclerosis: no evidence for disease causation (Mayeux et al) 2003;53:815

Parkin mutations and susceptibility alleles in late-onset Parkinson's disease (Oliveira et al) 2003;53:624

phenotypic spectrum associated with mutations in the *fukutin*-related protein gene (Mercuri et al) 2003;53:537

polymicrogyria and absence of pineal gland due to *PAX6* mutation (Mitchell et al) 2003;53:658

toward therapy for DYT1 dystonia: allele-specific silencing of mutant *TorsinA* (Gonzalez-Alegre et al) 2003;53:781

the V368I mutation in Twinkle does not segregate with AdPEO (Arenas et al) 2003;53:278 (Letter)

Myasthenia, refractory

treatment of refractory myasthenia: "rebooting" with high-dose cyclophosphamide (Drachman et al) 2003;53:29

Myelin basic protein

cross-reactivity with myelin basic protein and human herpesvirus-6 in multiple sclerosis (Tejada-Simon et al) 2003;53:189

Myelopathy

anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pitcock et al) 2003;53:580

Myoadenylate deaminase

phenotype modulators in myophosphorylase deficiency (Martinuzzi et al) 2003;53:497

Myocardial hypertrophy

cardiac energetics correlates to myocardial hypertrophy in Friedreich's ataxia (Bunse et al) 2003;53:121

Myophosphorylase deficiency

phenotype modulators in myophosphorylase deficiency (Martinuzzi et al) 2003;53:497

Narcolepsy

the neurobiology, diagnosis, and treatment of narcolepsy (Scammell) 2003;53:154

ND5 gene

is the mitochondrial complex I ND5 gene a hot-spot for MELAS causing mutations? (Lirolta et al) 2003;53:128

Neocortical atrophy

progressive neocortical damage in epilepsy (Liu et al) 2003;53:312

Neonatal hyperglycemia

concerns regarding transience and heterozygosity in neonatal hyperglycemia (Hamosh and Van Hove) 2003;53:685 (Letter)

concerns regarding transience and heterozygosity in neonatal hyperglycemia (Kure et al) 2003;53:685 (Reply)

Nerve growth factor

indifference rather than insensitivity to pain (Klein et al) 2003;53:417 (Letter)

indifference rather than insensitivity to pain (Toscano et al) 2003;53:418 (Reply)

NeuN

markers of cellular proliferation are expressed in cortical tubers (Lee et al) 2003;53:668

Neurogenesis

cerebral neurogenesis is induced by intranasal administration of growth factors (Jin et al) 2003;53:405

familial dementia with dentate atrophy and failure of neurogenesis (Hudson and Munoz) 2003;53:420 (Letter)

familial dementia with dentate atrophy and failure of neurogenesis (Song et al) 2003;53:421 (Reply)

statins induce angiogenesis, neurogenesis, and synaptogenesis after stroke (Chen et al) 2003;53:743

Neuroimaging

dopamine agonists and Parkinson's disease progression: what can we learn from neuroimaging studies (Marek et al) 2003;53:(suppl 3) S160

implications of neuroimaging for the treatment of epilepsy (Theodore) 2003;53:286 (Editorial)

Neuroinflammatory processes

neuroinflammatory processes in Parkinson's disease (Hunot and Hirsch) 2003;53:(suppl 3) S49

Neuronal antibodies

maternal neuronal antibodies associated with autism and a language disorder (Dalton et al) 2003;53:533

Neuronal cell death

gene profiling in spinal cord injury shows role of cell cycle neuronal death (Di Giovanni et al) 2003;53:454
mitochondrial uncoupling protein-2 protects the immature brain from excitotoxic neuronal death (Sullivan et al) 2003;53:711

Neuropathy

Schwann cell expression of PLP1 but not DM20 is necessary to prevent neuropathy (Shy et al) 2003;53:354

Neuropathy, antiretroviral toxic

FK506 is neuroprotective in a model of antiretroviral toxic neuropathy (Keswani et al) 2003;53:57

Neuropathy, autoimmune autonomic

the spectrum of autoimmune autonomic neuropathies (Klein et al) 2003;53:752

Neuropathy, cranial

anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pitcock et al) 2003;53:580

Neuropathy, optic

overlap of optic neuritis and anterior ischemic optic neuropathy (Horton) 2003;53:417 (Reply)

overlap of optic neuritis and anterior ischemic optic neuropathy (Lee and Fox) 2003;53:417 (Letter)

suppression of complex I gene expression induces optic neuropathy (Qi et al) 2003;53:198

Neuropathy, peripheral

anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pitcock et al) 2003;53:580

Neuropathy, sensory and autonomic

indifference rather than insensitivity to pain (Klein et al) 2003;53:417 (Letter)

indifference rather than insensitivity to pain (Toscano et al) 2003;53:418 (Reply)

Neuroprotection

additive neuroprotective effects of minocycline with creatine in a mouse model of ALS (Zhang et al) 2003;53:267

antiepileptic drugs as a possible neuroprotective strategy in brain ischemia (Calabresi et al) 2003;53:693

bioenergetic approaches for neuroprotection in Parkinson's disease (Beal) 2003;53:(suppl 3) S39

designing neuroprotective trials in Parkinson's disease (Kieburtz) 2003;53:(suppl 3) S100

FK506 is neuroprotective in a model of antiretroviral toxic neuropathy (Keswani et al) 2003;53:57

head cooling with mild systemic hypothermia in anesthetized piglets is neuroprotective (Tooley et al) 2003;53:65

imaging end points for monitoring neuroprotection in Parkinson's disease (Brooks) 2003;53:(suppl 3) S110

in vivo gene delivery of glial cell line-derived neurotrophic factor for Parkinson's disease (Kordower) 2003;53:(suppl 3) S120

mitochondrial uncoupling protein-2 protects the immature brain from excitotoxic neuronal death (Sullivan et al) 2003;53:711

neuroprotection for Parkinson's disease: prospects and promises (Olanow) 2003;53:(suppl 3) S1 (Editorial)

neuroprotection in Parkinson's disease: clinical trials (Stocchi and Olanow) 2003;53:(suppl 3) S87

rationale for the use of dopamine agonists as neuroprotective agents in Parkinson's disease (Schapira and Olanow) 2003;53:(suppl 3) S149

Neurosphere therapy

magnetic resonance imaging and neurosphere therapy of stroke in rat (Zhang et al) 2003;53:259

- Neurosteroids**
progesterone, neurosteroids, and the hormonal basis of catamenial epilepsy (Rogawski) 2003;53:288 (Editorial)
- Neurotrophic cross-talk**
neurotrophic cross-talk between the nervous and immune systems: implications for neurological diseases (Kerschensteiner et al) 2003;53:292
- Nigropallidal pathway**
plasticity of the nigropallidal pathway in Parkinson's disease (Whone et al) 2003;53:206
- Nitric oxide**
nitric oxide and the axonal death cascade (Waxman) 2003;53:150 (Editorial)
- Nystagmus, downbeat**
clinical significance of positionally induced downbeat nystagmus (Leigh) 2003;53:688 (Letter)
- Oculobulbar symptoms**
oculobulbar involvement is typical with Lambert-Eaton myasthenic syndrome (Burns et al) 2003;53:270
- Olfactory cortex**
epileptiform ictal discharges are prevented by periodic interictal spiking in the olfactory cortex (Librizzi and de Curtis) 2003;53:382
- Oligodendrocytes**
interleukin-1 β promotes oligodendrocyte death through glutamate excitotoxicity (Takahashi et al) 2003;53:588
- Ophthalmoplegia, autosomal dominant progressive external**
the V368I mutation in Twinkle does not segregate with AdPEO (Arenas et al) 2003;53:278 (Letter)
- Opioid receptors**
 μ opioid receptors and analgesia at the site of a peripheral nerve injury (Truong et al) 2003;53:366
- Opsoclonus-myoclonus syndrome**
autoantigen diversity in the opsoclonus-myoclonus syndrome (Bataller et al) 2003;53:347
- Optic neuritis**
influence of red wine on visual function and endothelin-1 plasma level in a patient with optic neuritis (Haufschmid et al) 2003;53:825 (Letter)
overlap of optic neuritis and anterior ischemic optic neuropathy (Horton) 2003;53:417 (Reply)
overlap of optic neuritis and anterior ischemic optic neuropathy (Lee and Fox) 2003;53:417 (Letter)
- Optic neuropathy**
suppression of complex I gene expression induces optic neuropathy (Qi et al) 2003;53:198
- Optic neuropathy, anterior ischemic**
overlap of optic neuritis and anterior ischemic optic neuropathy (Horton) 2003;53:417 (Reply)
overlap of optic neuritis and anterior ischemic optic neuropathy (Lee and Fox) 2003;53:417 (Letter)
- Orthostatic tremor**
[^{123}I]-FP-CIT-SPECT demonstrates dopaminergic deficit in orthostatic tremor (Katzschlager et al) 2003;53:489
- Osteopontin**
elevated osteopontin levels are associated with disease activity in relapsing-remitting multiple sclerosis patients (Vogt et al) 2003;53:818
- Oxidative damage**
peripheral biomarkers of oxidative damage in Alzheimer's disease (Chiabrando et al) 2003;53:419 (Letter)
peripheral biomarkers of oxidative damage in Alzheimer's disease (Montine et al) 2003;53:420 (Reply)
- Oxidative stress**
oxidative stress in Parkinson's disease (Jenner) 2003;53:(suppl 3) S26
- Oxygen utilization**
magnetic resonance cerebral metabolic rate of oxygen utilization in hyperacute stroke patients (Lee et al) 2003;53:227
- Pain perception**
indifference rather than insensitivity to pain (Klein et al) 2003;53:417 (Letter)
indifference rather than insensitivity to pain (Toscano et al) 2003;53:418 (Reply)
- Pakistanis**
an *ALS2* gene mutation causes hereditary spastic paraparesis in a Pakistani kindred (Gros-Louis et al) 2003;53:144 (Letter)
- Pallidotomy**
randomized trial of pallidotomy versus medical therapy for Parkinson's disease (Vitek et al) 2003;53:558
- Paralysis, flaccid**
asymmetric flaccid paralysis: a neuromuscular presentation of West Nile virus infection (Li et al) 2003;53:703
- Paraneoplastic disorders**
anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pitcock et al) 2003;53:580
- Paraplegia, hereditary spastic**
an *ALS2* gene mutation causes hereditary spastic paraparesis in a Pakistani kindred (Gros-Louis et al) 2003;53:144 (Letter)
- Parkin**
Parkin mutations and susceptibility alleles in late-onset Parkinson's disease (Oliveira et al) 2003;53:624
- Parkinson's disease, analysis**
apoptosis in Parkinson's disease: signals for neuronal degeneration (Tatton et al) 2003;53:(suppl 3) S61
bioenergetic approaches for neuroprotection in Parkinson's disease (Beal) 2003;53:(suppl 3) S39
coffee drinking, cigarette smoking, and Parkinson's disease (Hernán et al) 2003;53:546 (Reply)
coffee drinking, cigarette smoking, and Parkinson's disease (James) 2003;53:546 (Letter)
designing neuroprotective trials in Parkinson's disease (Kieburz) 2003;53:(suppl 3) S100
endogenous dopamine release after pharmacological challenges in Parkinson's disease (Piccini et al) 2003;53:647
neuroinflammatory processes in Parkinson's disease (Hunot and Hirsch) 2003;53:(suppl 3) S49
neuroprotection for Parkinson's disease: prospects and promises (Olanow) 2003;53:(suppl 3) S1 (Editorial)
neuroprotection in Parkinson's disease: clinical trials (Stocchi and Olanow) 2003;53:(suppl 3) S87
plasticity of the nigropallidal pathway in Parkinson's disease (Whone et al) 2003;53:206
weight loss in Parkinson's disease (Chen et al) 2003;53:676
- Parkinson's disease, assessment**
dopamine agonists and Parkinson's disease progression: what can we learn from neuroimaging studies (Marek et al) 2003;53:(suppl 3) S160
imaging end points for monitoring neuroprotection in Parkinson's disease (Brooks) 2003;53:(suppl 3) S110
- Parkinson's disease, late-onset**
Parkin mutations and susceptibility alleles in late-onset Parkinson's disease (Oliveira et al) 2003;53:624

Parkinson's disease, pathogenesis

genetic and environmental factors in the cause of Parkinson's disease (Warner et al) 2003;53:(suppl 3) S16
lack of association between the BDNF Val66Met polymorphism and Parkinson's disease in a Swedish population (Håkansson et al) 2003;53:823 (Letter)
oxidative stress in Parkinson's disease (Jenner) 2003;53:(suppl 3) S26
proteolytic stress: a unifying concept for the etiopathogenesis of Parkinson's disease (McNaught and Olanow) 2003;53:(suppl 3) S73

Parkinson's disease, therapy

in vivo gene delivery of glial cell line-derived neurotrophic factor for Parkinson's disease (Kordower) 2003;53:(suppl 3) S120
limitations of current Parkinson's disease therapy (Rascol et al) 2003;53:(suppl 3) S3
randomized trial of pallidotomy versus medical therapy for Parkinson's disease (Vitek et al) 2003;53:558
rationale for the use of dopamine agonists as neuroprotective agents in Parkinson's disease (Schapira and Olanow) 2003;53:(suppl 3) S149
toward full restoration of synaptic and terminal function of the dopaminergic system in Parkinson's disease by stem cells (Isacson et al) 2003;53:(suppl 3) S135

PAX6 gene

polymicrogyria and absence of pineal gland due to PAX6 mutation (Mitchell et al) 2003;53:658

p34cdc2

markers of cellular proliferation are expressed in cortical tubers (Lee et al) 2003;53:668

PDX1 gene

a new case of pyruvate dehydrogenase deficiency due to a novel mutation in the PDX1 gene (Dey et al) 2003;53:273

Peripheral nervous system

μ opioid receptors and analgesia at the site of a peripheral nerve injury (Truong et al) 2003;53:366
peripheral nervous system complications of sickle cell disease (Prengler et al) 2003;53:143 (Reply)
peripheral nervous system complications of sickle cell disease (Roohi et al) 2003;53:143 (Letter)

Peripheral neuropathy

anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pitcock et al) 2003;53:580

Phenotype modulators

phenotype modulators in myophosphorylase deficiency (Martinuzzi et al) 2003;53:497

Pineal gland

polymicrogyria and absence of pineal gland due to PAX6 mutation (Mitchell et al) 2003;53:658

Piriform cortex

epileptiform ictal discharges are prevented by periodic interictal spiking in the olfactory cortex (Librizzi and de Curtis) 2003;53:382

Plasma

influence of red wine on visual function and endothelin-1 plasma level in a patient with optic neuritis (Haufschmid et al) 2003;53:825 (Letter)

Plasticity

age-dependent changes in the ability to encode a novel elementary motor memory (Sawaki et al) 2003;53:521
plasticity of the nigropallidal pathway in Parkinson's disease (Whone et al) 2003;53:206
statins induce angiogenesis, neurogenesis, and synaptogenesis after stroke (Chen et al) 2003;53:743

PLP1 gene

Schwann cell expression of PLP1 but not DM20 is necessary to prevent neuropathy (Shy et al) 2003;53:354

Poliomyelitis

poliomyelitis and flaviviruses (Johnson and Cornblath) 2003;53:691 (Editorial)

Polymicrogyria

polymicrogyria and absence of pineal gland due to PAX6 mutation (Mitchell et al) 2003;53:658

Polymicrogyria, bilateral frontoparietal

bilateral frontoparietal polymicrogyria: clinical and radiological features in 10 families with linkage to chromosome 16 (Chang et al) 2003;53:596

Position

clinical significance of positionally induced downbeat nystagmus (Leigh) 2003;53:688 (Letter)

Positron emission tomography

imaging end points for monitoring neuroprotection in Parkinson's disease (Brooks) 2003;53:(suppl 3) S110

Prefrontotectal tract

a direct prefrontotectal tract against distractibility in the human brain (Gaymard et al) 2003;53:542

Prion protein

PRNP Val129 homozygosity increases risk for early-onset Alzheimer's disease (Dermaut et al) 2003;53:409
valporic acid and prion proteins (Sander and Duncan) 2003;53:688 (Letter)

Prodynorphin gene promoter

prodynorphin gene promoter polymorphism and temporal lobe epilepsy (Stögemann et al) 2003;53:281 (Reply)
prodynorphin gene promoter polymorphism and temporal lobe epilepsy (Tilgen et al) 2003;53:280 (Letter)

Progesterone

progesterone, neurosteroids, and the hormonal basis of catamenial epilepsy (Rogawski) 2003;53:288 (Editorial)
seizure exacerbation associated with inhibition of progesterone metabolism (Herzog and Frye) 2003;53:390

Progressive external ophthalmoplegia, autosomal dominant

the V368I mutation in Twinkle does not segregate with AdPEO (Arenas et al) 2003;53:278 (Letter)

Proteolipid protein 1

Schwann cell expression of PLP1 but not DM20 is necessary to prevent neuropathy (Shy et al) 2003;53:354

Proteolytic stress

proteolytic stress: a unifying concept for the etiopathogenesis of Parkinson's disease (McNaught and Olanow) 2003;53:(suppl 3) S73

Proton magnetic resonance spectroscopy (^1H -MRS)

axonal injury within language network in primary progressive aphasia (Catani et al) 2003;53:242

Psychogenic nonepileptic seizures

outcome in psychogenic nonepileptic seizures: 1 to 10-year follow-up in 164 patients (Reuber et al) 2003;53:305

treating psychogenic nonepileptic seizures: easier said than done (Lesser) 2003;53:285 (Editorial)

PTEN gene

mechanisms underlying PTEN regulation of vascular endothelial growth factor and angiogenesis (Gomez-Manzano et al) 2003;53:109

Pyruvate dehydrogenase deficiency

a new case of pyruvate dehydrogenase deficiency due to a novel mutation in the PDX1 gene (Dey et al) 2003;53:273

Quinacrine

quinacrine-induced cytolytic hepatitis in sporadic Creutzfeldt-Jakob disease (Scoazec et al) 2003;53:546 (Letter)

Rapid eye movement sleep behavior disorder

slowing of electroencephalogram in rapid eye movement sleep behavior disorder (Fantini et al) 2003;53:774

Red wine

influence of red wine on visual function and endothelin-1 plasma level in a patient with optic neuritis (Haufschmid et al) 2003;53:825 (Letter)

Remyelination

efficient central nervous system remyelination requires T cells (Bieber et al) 2003;53:680

Rippling muscle disease

homozygous mutations in *caveolin-3* cause a severe form of rippling muscle disease (Kubisch et al) 2003;53:512

Schwann cells

Schwann cell expression of PLP1 but not DM20 is necessary to prevent neuropathy (Shy et al) 2003;53:354

Screen flicker

human lateral geniculate nucleus and visual cortex respond to screen flicker (Krolak-Salmon et al) 2003;53:73

Segmental flaccid paralysis

asymmetric flaccid paralysis: a neuromuscular presentation of West Nile virus infection (Li et al) 2003;53:703

Seizures

anti-neuronal nuclear autoantibody type 2: paraneoplastic accompaniments (Pitcock et al) 2003;53:580

correlation between extracellular glucose and seizure susceptibility in adult rats (Schwechter et al) 2003;53:91

epileptiform ictal discharges are prevented by periodic interictal spiking in the olfactory cortex (Librizzi and de Curtis) 2003;53:382

mitochondrial uncoupling protein-2 protects the immature brain from excitotoxic neuronal death (Sullivan et al) 2003;53:711

seizure exacerbation associated with inhibition of progesterone metabolism (Herzog and Frye) 2003;53:390

Seizures, absence

functional magnetic resonance imaging of human absence seizures (Salek-Haddadi et al) 2003;53:663

Seizures, early-life

epilepsy after early-life seizures can be independent of hippocampal injury (Raol et al) 2003;53:503

Seizures, psychogenic nonepileptic

outcome in psychogenic nonepileptic seizures: 1 to 10-year follow-up in 164 patients (Reuber et al) 2003;53:305

treating psychogenic nonepileptic seizures: easier said than done (Lesser) 2003;53:285 (Editorial)

Sensory neuropathy, hereditary

indifference rather than insensitivity to pain (Klein et al) 2003;53:417 (Letter)

indifference rather than insensitivity to pain (Toscano et al) 2003;53:418 (Reply)

Serum

chemokines in serum and cerebrospinal fluid of Alzheimer's disease patients (Galimberti et al) 2003;53:547 (Letter)

Sickle cell disease

peripheral nervous system complications of sickle cell disease (Prengler et al) 2003;53:143 (Reply)

peripheral nervous system complications of sickle cell disease (Roohi et al) 2003;53:143 (Letter)

Simvastatin

statins induce angiogenesis, neurogenesis, and synaptogenesis after stroke (Chen et al) 2003;53:743

Single photon emission computed tomography

diminished striatal [¹²³I]iodobenzovesamicol binding in idiopathic cervical dystonia (Albin et al) 2003;53:528 [¹²³I]-FP-CIT-SPECT demonstrates dopaminergic deficit in orthostatic tremor (Katzenschlager et al) 2003;53:489

imaging end points for monitoring neuroprotection in Parkinson's disease (Brooks) 2003;53:(suppl 3) S110

Skeletal muscle

is there mitochondrial dysfunction in amyotrophic lateral sclerosis skeletal muscle? (Echaniz-Laguna et al) 2003;53:687 (Reply)

is there mitochondrial dysfunction in amyotrophic lateral sclerosis skeletal muscle? (Vielhaber et al) 2003;53:686 (Letter)

Sleep behavior

slowing of electroencephalogram in rapid eye movement sleep behavior disorder (Fantini et al) 2003;53:774

Smoking

coffee drinking, cigarette smoking, and Parkinson's disease (Hernán et al) 2003;53:546 (Reply)

coffee drinking, cigarette smoking, and Parkinson's disease (James) 2003;53:546 (Letter)

SOD1 gene

efficient three-drug cocktail for disease induced by mutant superoxide dismutase (Kriz et al) 2003;53:429

N19S, a novel single base substitution in the SOD1 gene in sporadic amyotrophic lateral sclerosis: no evidence for disease causation (Mayeux et al) 2003;53:815

Sodium channel blockers

blockers of sodium and calcium entry protect axons from nitric oxide-mediated degeneration (Kapoor et al) 2003;53:174

Spastic paraplegia, hereditary

an *ALS2* gene mutation causes hereditary spastic paraparesis in a Pakistani kindred (Gros-Louis et al) 2003;53:144 (Letter)

Spinal cord injury

gene profiling in spinal cord injury shows role of cell cycle neuronal death (Di Giovanni et al) 2003;53:454

Statins

statins induce angiogenesis, neurogenesis, and synaptogenesis after stroke (Chen et al) 2003;53:743

Stem cells

toward full restoration of synaptic and terminal function of the dopaminergic system in Parkinson's disease by stem cells (Isaacson et al) 2003;53:(suppl 3) S135

Stress, oxidative

oxidative stress in Parkinson's disease (Jenner) 2003;53:(suppl 3) S26

Stress, proteolytic

proteolytic stress: a unifying concept for the etiopathogenesis of Parkinson's disease (McNaught and Olanow) 2003;53:(suppl 3) S73

Stroke

antiepileptic drugs as a possible neuroprotective strategy in brain ischemia (Calabresi et al) 2003;53:693

magnetic resonance imaging and neurosphere therapy of stroke in rat (Zhang et al) 2003;53:259

new perspectives on developing acute stroke therapy (Fisher and Ratan) 2003;53:10

- statins induce angiogenesis, neurogenesis, and synaptogenesis after stroke (Chen et al) 2003;53:743
- Stroke, arterial ischemic**
investigation of risk factors in children with arterial ischemic stroke (Ganesan et al) 2003;53:167
- Stroke, cerebellar**
decoupling of autonomic and cognitive emotional reactions after cerebellar stroke (Annoni et al) 2003;53:654
- Stroke, childhood**
investigation of risk factors in children with arterial ischemic stroke (Ganesan et al) 2003;53:167
risk factors for childhood stroke: little folks have different strokes! (deVeber) 2003;53:149 (Editorial)
- Stroke, hyperacute**
magnetic resonance cerebral metabolic rate of oxygen utilization in hyperacute stroke patients (Lee et al) 2003;53:227
- Superoxide dismutase**
efficient three-drug cocktail for disease induced by mutant superoxide dismutase (Kriz et al) 2003;53:429
- N19S, a novel single base substitution in the SOD1 gene in sporadic amyotrophic lateral sclerosis: no evidence for disease causation (Mayeux et al) 2003;53:815
- Swedish population**
lack of association between the BDNF Val66Met polymorphism and Parkinson's disease in a Swedish population (Håkansson et al) 2003;53:823 (Letter)
- Synaptogenesis**
statins induce angiogenesis, neurogenesis, and synaptogenesis after stroke (Chen et al) 2003;53:743
- T cells**
efficient central nervous system remyelination requires T cells (Bieber et al) 2003;53:680
- T2 lesions**
new T2 lesions enable an earlier diagnosis of multiple sclerosis in clinically isolated syndromes (Dalton et al) 2003;53:673
- Tau gene**
a novel L266V mutation of the tau gene causes frontotemporal dementia with a unique tau pathology (Kobayashi et al) 2003;53:133
- Temporal lobe epilepsy**
prodynorphin gene promoter polymorphism and temporal lobe epilepsy (Stögemann et al) 2003;53:281 (Reply)
prodynorphin gene promoter polymorphism and temporal lobe epilepsy (Tilgen et al) 2003;53:280 (Letter)
- Temporal processing**
temporal processing of visuotactile and tactile stimuli in writer's cramp (Fiorio et al) 2003;53:630
- Thrombolysis**
effect of ultrasound on thrombolysis of middle cerebral artery occlusion during thrombolytic therapy with transcranial color-coded sonography (Eggers et al) 2003;53:797
- Thrombolytic therapy**
effect of ultrasound on thrombolysis of middle cerebral artery occlusion during thrombolytic therapy with transcranial color-coded sonography (Eggers et al) 2003;53:797
- Timing**
temporal processing of visuotactile and tactile stimuli in writer's cramp (Fiorio et al) 2003;53:630
- Tinnitus**
transient suppression of tinnitus by transcranial magnetic stimulation (Plewnia et al) 2003;53:263
- TorsinA**
toward therapy for DYT1 dystonia: allele-specific silencing of mutant TorsinA (Gonzalez-Alegre et al) 2003;53:781
- Training**
age-dependent changes in the ability to encode a novel elementary motor memory (Sawaki et al) 2003;53:521
- Transcranial color-coded sonography**
effect of ultrasound on thrombolysis of middle cerebral artery occlusion (Eggers et al) 2003;53:797
- Transcranial magnetic stimulation**
motor cortex excitability in Alzheimer's disease: a transcranial magnetic stimulation study (Ferreri et al) 2003;53:102
motor cortex hyperexcitability to transcranial magnetic stimulation in Alzheimer's disease: evidence of impaired glutamatergic neurotransmission? (Di Lazzaro et al) 2003;53:823 (Letter)
motor cortex hyperexcitability to transcranial magnetic stimulation in Alzheimer's disease: evidence of impaired glutamatergic neurotransmission? (Rossini et al) 2003;53:824 (Reply)
transient suppression of tinnitus by transcranial magnetic stimulation (Plewnia et al) 2003;53:263
- Tremor**
tremor and ataxia in fragile X premutation carriers: blinded videotape study (Berry-Kravis et al) 2003;53:616
- Tremor, orthostatic**
[¹²³I]-FP-CIT-SPECT demonstrates dopaminergic deficit in orthostatic tremor (Katzenbach et al) 2003;53:489
- TRKA (NTRK1) gene**
indifference rather than insensitivity to pain (Klein et al) 2003;53:417 (Letter)
indifference rather than insensitivity to pain (Toscano et al) 2003;53:418 (Reply)
- Tuberous sclerosis complex**
markers of cellular proliferation are expressed in cortical tubers (Lee et al) 2003;53:668
- Tumor growth**
continuous growth of mean tumor diameter in a subset of grade II gliomas (Mandonnet et al) 2003;53:524
- Turkish patients**
a new mutation of the *fukutin* gene in a non-Japanese patient (Silan et al) 2003;53:392
- Twinkle protein**
the V368I mutation in Twinkle does not segregate with AdPEO (Arenas et al) 2003;53:278 (Letter)
- Ultrasound, transcranial**
effect of ultrasound on thrombolysis of middle cerebral artery occlusion (Eggers et al) 2003;53:797
- Uncoupling protein-2**
mitochondrial uncoupling protein-2 protects the immature brain from excitotoxic neuronal death (Sullivan et al) 2003;53:711
- Valproic acid**
valproic acid and prion proteins (Sander and Duncan) 2003;53:688 (Letter)
- Vascular endothelial growth factor**
mechanisms underlying PTEN regulation of vascular endothelial growth factor and angiogenesis (Gomez-Manzano et al) 2003;53:109
- Ventral anterior insula**
an attention modulated response to disgust in human ventral anterior insula (Krolak-Salmon et al) 2003;53:446

Video-screen flicker

human lateral geniculate nucleus and visual cortex respond to screen flicker (Krolak-Salmon et al) 2003;53:73

Visual acuity

influence of red wine on visual function and endothelin-1 plasma level in a patient with optic neuritis (Haufschild et al) 2003;53:825 (Letter)

Visual cortex

human lateral geniculate nucleus and visual cortex respond to screen flicker (Krolak-Salmon et al) 2003;53:73

Visual-evoked potentials

influence of red wine on visual function and endothelin-1 plasma level in a patient with optic neuritis (Haufschild et al) 2003;53:825 (Letter)

Visual fields

influence of red wine on visual function and endothelin-1 plasma level in a patient with optic neuritis (Haufschild et al) 2003;53:825 (Letter)

Visuospatial processing deficits

cortical anomalies associated with visuospatial processing deficits (Isaacs et al) 2003;53:768

Weight loss

weight loss in Parkinson's disease (Chen et al) 2003;53:676

West Nile virus infection

asymmetric flaccid paralysis: a neuromuscular presentation of West Nile virus infection (Li et al) 2003;53:703

White matter

chronic hydrocephalus in rats and humans: white matter loss and behavior changes (Del Bigio et al) 2003;53:337

homocysteine, white matter hyperintensities, and cognition in healthy elderly people (Dufouil et al) 2003;53:214

a new leukoencephalopathy with brainstem and spinal cord involvement and high lactate (van der Knaap et al) 2003;53:252

Wine, red

influence of red wine on visual function and endothelin-1 plasma level in a patient with optic neuritis (Haufschild et al) 2003;53:825 (Letter)

Writer's cramp

temporal processing of visuotactile and tactile stimuli in writer's cramp (Fiorio et al) 2003;53:630